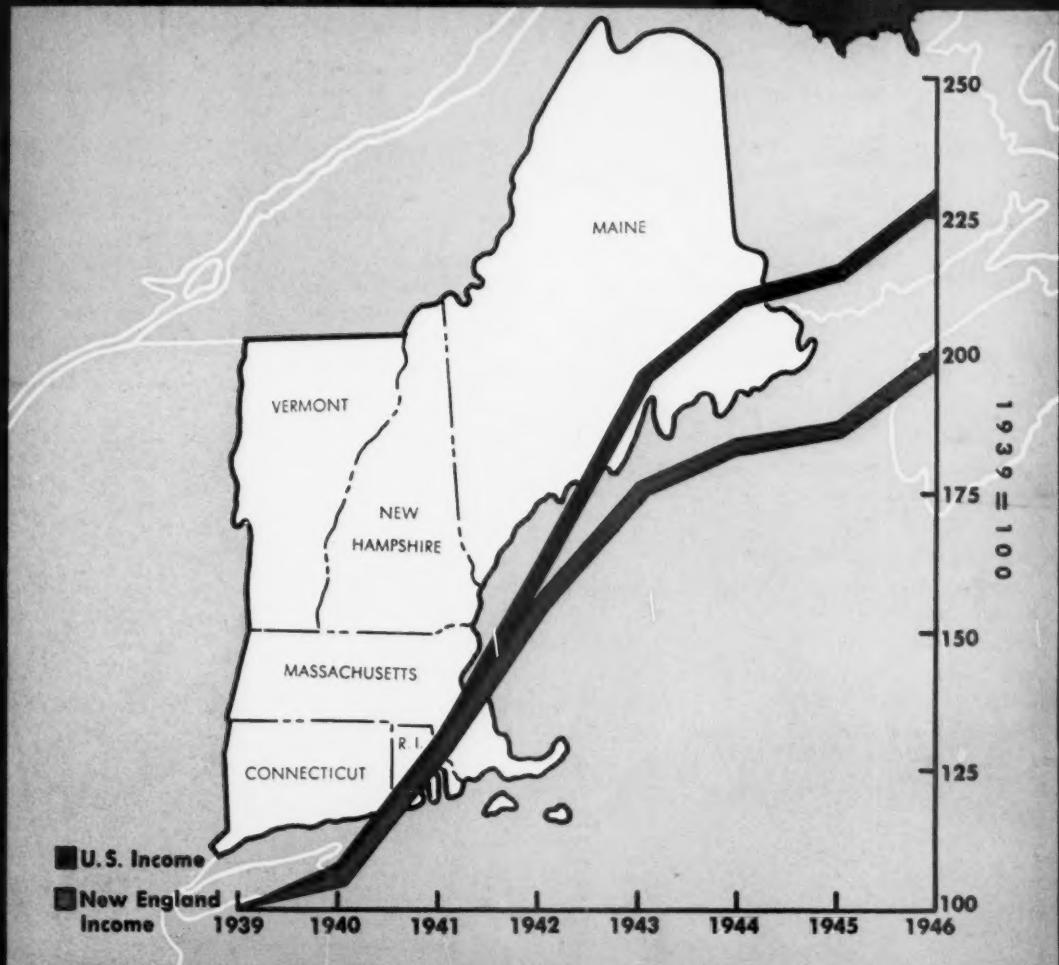


BUSINESS WEEK

AUG. 30 1947

THE NEW ENGLAND MARKET



No. 5 in a series of Reports to Executives on "The New American Market" (page 43)

A McGRAW-HILL PUBLICATION



Who decides the profits of corporations? YOU DO

ACORPORATION can make a profit only so long as it makes a product so good that you want it, at a price so low that you will pay it. Therefore a profit is a sign that a company is serving the

public and so providing jobs.

The demagogue who attacks profit is, you see, attacking the public which is you, and attacking the source of jobs—your job.



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&
SWASEY**
Machine Tools
Cleveland

YOU CAN MACHINE IT BETTER, FASTER, FOR LESS WITH WARNER & SWASEY TURRET LATHES, MULTIPLE SPINDLE AUTOMATICS AND TAPPING MACHINES



Photo courtesy of Granite Rock Co., Watsonville, Calif.

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typical example of B.F. Goodrich development in rubber

UP THAT "rubber elevator," to a height of 14 stories, go 1000 tons of rock *every hour*—rock that could never have been sold, would never have been available for construction jobs except for a B.F. Goodrich development.

The rock was there, but it was 130 feet below the crusher plant, and conveyor belts weren't strong enough to absorb the shock of 3-foot hunks of granite and carry the tremendous load up that long steep lift. It looked as though the rock couldn't be quarried, crushed and sold.

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A B.F. Goodrich Cord Belt was installed on this "impossible" operation. It has been carrying 1000 tons an hour without a moment's trouble or delay, without a cent of maintenance expense.

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Hundreds of restaurants all over the country rely on Airkem Service to overcome odors of tobacco smoke, food, crowds and liquor. They depend on it to keep the air freshened for the enjoyment of their patrons.

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WASHINGTON OUTLOOK



FEDERAL EMPLOYMENT in Washington proper has dropped below 200,000—first time since the beginning of the war expansion over five years ago.

•

HOW MUCH STEEL

is going into inventory? The Harriman committee checking into U. S. ability to help Europe under the Marshall plan is seeking the answer.

It is asking a sample of industrial users:

What was your inventory last January of sheet and strip, of all other steel?

What was it on June 30?

How much steel did you buy in that period?

•

Present steel statistics don't disclose how much is going into inventory.

Some economists argue that inventory buildup accounts for tight supply. They think when it stops, the shortage will be over. No one knows.

Here's a case—as we noted a while back (BW—Aug. 16'47, p6)—where these Marshall plan studies are fattening up official understanding of the postwar domestic economy.

•

SYNTHETIC RUBBER ALLOCATION

may soon be confined to tires and latex foam.

There's a revision of the R-1 rubber order in the making that frees all other products—more than 5,000—to use as much crude as producers wish.

Idea is that by limiting specification of synthetic to the two big rubber products, administration of controls can be almost cut and dried.

However, if the order goes through, it's a better than even prospect that tires would have to be kept to present ratios (about three-fourths synthetic in passenger car sizes).

That would insure a continued market for the 250,000 tons of synthetic that the government wants as a defense minimum.

•

For the long term, the rubber industry is talking now for a plan simply allocating each producer a bulk quantity of synthetic, letting him use it where he pleases—rather than product specification in any form.

Congress has the job of fixing the permanent rubber policy next spring.

THE PICTURE HAS CHANGED in the last two weeks on who's going to succeed Hannegan as Democratic national chairman.

It's now almost certain that Agriculture Secretary Anderson won't take the post. His health won't permit; the job is a grueling, 24-hour-a-day affair, particularly next year.

So you can flip a coin at this point as to which of these is the most likely prospect to lead Truman's reelection campaign:

Sam Jackson of Indiana (as chairman of the '44 convention he played a vital role in blocking Wallace's bid for renomination); ex-Rep. Joseph E. Casey of Massachusetts; Sen. McGrath of Rhode Island.

Gael Sullivan is all but out of the running, despite Hannegan's support.

•

WARTIME POWER POOLING

is coming back.

Reason: Many utilities will be running on narrower margins of capacity during peak demand period next winter than anytime during the war.

Federal Power Commission already has okayed five utility requests for "emergency" power interchange tie-ups; such approvals do not bring the companies under usual federal regulation.

One of the approvals reestablishes a Connecticut Light & Power Co. tie-line which the company cut some time ago during its legal fight to prove FPC had no jurisdiction over its operations.

Another is in the Northwest; three are in the Southwest. More applications are coming in.

•

ARMY GENERALS fear that Forrestal—under unification—will upset their traditional freedom in budget-making and money dealings with Congress.

In the past, Army budget requests—and justifications before congressional committees—have been handled by the generals. There has been little or no interference from the civilian Secretary of War.

Forrestal, however, has dominated Navy budget-making himself. And he's already showing signs of intending—when he moves in as Secretary of Defense next month—to take direction of both Army and Air Force budget-making, too.

•

• Rep. Gene Cox of Georgia replaced Rep. William Colmer on the Herter committee (BW—Aug. 23'47, p6) before it sailed for Europe this week. Colmer resigned because of health. Cox becomes the third

WASHINGTON OUTLOOK (Continued)

12-termer among 19 members; he's also on the all-important Rules Committee. . . .

- Those who have read the Majority Policy Committee's "Story of the Eightieth Congress"—written for press distribution and G.O.P. campaign speakers—say it's a buildup for Taft. . . .
- Italy's request for an additional \$350-million in credits—from the World Bank and the Export-Import Bank—won't be acted on until it uses up the \$77-million remaining balance of its last U.S. credit. That will be around year's end. . . .
- Lawrence C. Kingsland, St. Louis lawyer who succeeds Casper Ooms as Patent Commissioner, is an old-time friend of Truman. Also, he was picked by Ooms to advise the Philippine Republic on drafting patent and trademark laws earlier this year.

industrial expansion has been crowding \$4-billion quarterly since the fall of last year.

Effects of wartime expansion can best be gauged industry-by-industry:

Steel—War, plus government money, produced the first big increase in plant since the 1920's ingot capacity rose from 81½-million tons in 1940 to 95½-million in '45; it has been reduced now to 91-million by postwar retirements.

Already it's a lively issue whether more isn't needed.

And, except for some electric furnace capacity, just about all war-built steel mills are—or soon will be—operating and in private hands. Apart from Kaiser, the same firms generally own the new plant that owned the old.

Synthetic rubber—This new industry will be under government thumb for the visible future (page 5). The styrene plants have been sold off. But butadiene and polymerization plants are being held until Congress sets a rubber policy.

Aluminum—The government's refusal to sell its aluminum facilities to Aluminum Co. of America resulted in setting up two new firms in ingot production—Kaiser and Reynolds. Their combined capacity about equals Alcoa's; the total is three times prewar.

Kaiser and Reynolds only lease the ingot facilities, however; if demand for the metal should fall sharply these plants could be back in the government's lap.

Magnesium—Low postwar demand—well within the 30,000-ton capacity of Dow and Kaiser—has prevented sale of government plants for metal production. Many, however, have been sold for conversion to chemical work; about 200,000 tons of capacity are protected by standby clauses.

Gasoline—Despite tight refinery capacity, high octane plants are still undisposed of. Prospect: New process for converting to higher-test auto gas may provide a market.

Chemicals—Nitrogen (ammonia) capacity was more than doubled. New producers, mostly leasing facilities, have reduced prewar dominance of Allied Chemical and du Pont.

Sulphuric acid capacity went up only 10%; new plants were sold to former producers.

Chlorine and caustic soda capacity was boosted 20% by government building; private expansion is still going on. Government plants—except those scrambled in arsenals—have been sold without changing industry's makeup.

BUGABOO FORGOTTEN

Two years ago—at war's end—a lot of people were fretting over what would happen to all the wartime plant expansion that government money had built.

Through the war years, the government had run up new plants to the tune of 20%-25% of all the manufacturing capacity that existed before the war.

Many a businessman feared:

(1) Capital goods industries might be working themselves out of a job; the country could be over-equipped for years.

(2) Government ownership of large sectors of industry might become a lever for control of business.

It hasn't worked out that way.

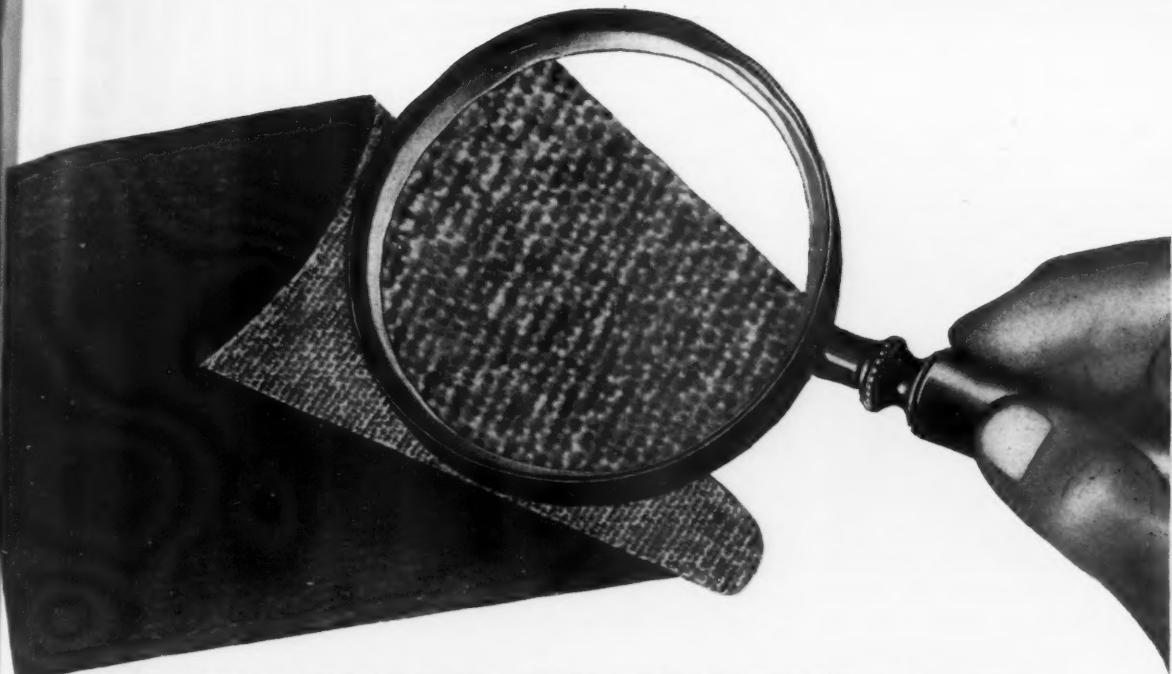
Today, the bugaboo of plant capacity is largely gone—into the same limbo as the 8-million men supposed to be out of work after fighting stopped.

What has happened?

For one thing, nearly two-thirds of wartime expansion was in three lines—aircraft, ships, powder, and shot. These facilities are almost irrelevant to peacetime needs; they're being used—if at all—as so much land, so many roofs.

More significant: Wartime expansion—big as it looked after the long drag of the 1930's—has turned out to be far less than needs accumulated during the depression and the war.

Evidence: Just once did wartime expansion hit \$2-billion a quarter—third quarter of '42; but



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THE COVER

The New England Market

Do you recognize the factory picture on page 43? It's a view of the old Amoskeag mills in Manchester, N. H.

Once the world's largest cotton textile producer, Amoskeag went on the rocks a dozen years ago. Manchester businessmen and other leading citizens averted catastrophe for the city by buying the mill facilities through a cooperative enterprise—Amoskeag Industries, Inc. This organization in a few years put nearly 100 small companies in the 50-odd buildings in the Amoskeag setup. Thus, employment was provided for a good percentage of the town's labor force. Diversification of industry was achieved practically under one roof.

• **Typical**—The Amoskeag mill experience typifies to a great extent the industrial problem long facing New England.

Ever since textile mills began to migrate to the South from New England, the region has had to adapt itself somehow or other to the changing condition. The problem has never been completely solved. But Yankee ingenuity has done a lot to lick it.

• **Opportunity Seized**—World War II gave New England a new opportunity to stabilize itself. The opportunity was seized gratefully. Much industrial progress was made in wartime and continued in the immediate postwar years.

The changes that have been taking place are described in the fifth of a series of regional reports (Report to Executives: "The New American Market," page 43).

• **Comparison**—How New England did in comparison with other regions of the nation is pointed up in the chart on the cover. The lag behind the U. S. in total income from 1939 through 1946 stands out clearly. Similarly, the New England performance as measured by other marketing guides—population, labor force, sales, per capita income, and savings—appears to be relatively poor.

But it is important to study the region more minutely and from other angles to get the full perspective. In that way, a true appraisal of the nation's oldest region will be gained. It also makes it possible to form an intelligent answer to the question: "Where does New England go from here?"

The Pictures—Press Assn.—16, 24, 28, 65, 70, 86; Acme—16, 17, 85; Harris & Ewing—19; Charles Phelps Cushing—43; Pix—20; Federal Works Agency—89; Int. News—18.

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USINESS OUTLOOK

BUSINESS WEEK

AUGUST 30, 1947

1
SERVICE

Retail volume will remain very large for the next couple of months.

Personal income, as a whole, will rise further. This probably will mean that trade, measured in dollars, will break all records after allowance for seasonal variation.

But there are a few ticklish spots in manufacturing. The nonferrous metal lines, for example, have been declining (page 91).

Three main factors will contribute to the sustained rise in personal income (barring a serious drop in prices).

(1) Farmers' marketings of cash crops will be very large. And prices, so far, are the highest ever.

(2) Wage increases are in the offing (BW—Aug. 23 '47, p 15).

(3) Veterans will cash about \$1 1/2-billion of terminal leave bonds.

Then, on Nov. 1, controls will come off consumer credit. That won't add anything to personal incomes, but it will add to consumers' ability to anticipate income. This means some billions of spending.

One intangible in 1947 farm income is how fast meat animals come to market. The corn harvest holds the answer to that one (page 17).

Rain and milder weather of the last week helped corn some.

It now remains to be seen whether (1) corn shortages force lean livestock to market early; (2) a lot of soft corn holds animals on farms to eat it before it spoils; or (3) a fair crop regularizes marketings.

But here is the big thing as far as the farm market is concerned:

It doesn't matter whether the farmer pockets his livestock money in 1947 or 1948. What's important is how much he takes in for the season. He knows how many animals he will sell, about what they will bring. His spending will run accordingly, whether for cash or on credit.

Dollar crises abroad aren't likely to have much influence on the volume of farm exports. But prices can be affected.

The government is committed to a big-crop policy well into the future. That means we shall export even if it's mostly on the cuff.

But the price problem remains. Present high markets are supported by foreign purchases, U. S. government operations, and normal domestic trade. Subtract the foreign purchases and the picture changes.

Our government would have to make up the difference. Meanwhile, prices might slide toward the support levels fixed by Congress.

This can make quite a difference in the size of farm incomes.

Volume of export will have a much more important short-run effect on manufacturing than on agriculture.

The government isn't pushing trade in manufactures like it is in farm products. Yet an estimated 2-million nonagricultural workers are producing for export at the present time.

Any cut in trade could idle a major fraction of these workers. It also would mean smaller unit and dollar output. This could hurt in lines where there isn't any unfilled domestic demand.

Inventory expansion appears to have come about to a halt.

Latest figures cover June. Manufacturers' inventories were up about

BUSINESS OUTLOOK (Continued)

BUSINESS WEEK
AUGUST 30, 1947

\$250-million for the month; wholesalers' and retailers' declined a like amount. It was the smallest gain for manufacturing in a year and the first standoff in the over-all figure for the same period.

This means most materials pipelines are filled, except for certain still-scarce items such as flat steel. It gives hope that others will shortly be filled—even though that day can't yet be seen in steel.

But, while filling the pipelines gives promise of smoother production, it also has an ominous side.

Money no longer flows into inventory expansion. That means less output of many materials. This, in turn, means some jobs lost.

Coinciding with declining exports, this can mean some recession in over-all activity before too long.

Watch unemployment figures over the remainder of this year

The number of jobs will drop about 3-million by January. That, however, is a seasonal decline. It should not add to total jobless.

But if employment sinks below 57-million to 57½-million—or if unemployment goes much over the present 2.6-million—it may mark the beginning of the much-discussed but long-delayed recession.

Factors that could cause unemployment: more than seasonal decline in construction, less manufacturing for export, lower demand for raw materials, a reduction in the present phenomenal plant expansion.

Copper's turnaround has fooled the people who thought they would never be able to get enough of the red metal.

Users added 50,000 tons to stocks in the first seven months of this year. Half the total was accumulated in July alone when consumption fell to the lowest level of the year.

Lower prices for raw cotton and leather in recent markets indicate that the pickup in textile and shoe demand hasn't carried far.

These lines had a good bit of ground to make up. The Dept. of Commerce index for clothing and footwear output in May was nearly 20% down from May of 1946. This was despite gains in most men's garments.

In women's and children's apparel, the decline was about one-third. Women's suits, coats, and blouses were among the lines hardest hit.

Hosiery did relatively well with a decline of only 2%.

Rising construction activity (page 15) has changed a lot of ideas on building material prices.

The Dept. of Commerce lumber survey committee, composed of industry leaders, this week decided lumber wasn't likely to come down. In fact, reports around the country were of rises rather than declines.

On the production side, the committee noted a second-quarter gain of 6% over the corresponding 1946 period. Such gains, the members predicted, can't be maintained unless prices stay high.

June output, though off from May, was 39% over the 1939 average.

Fuel oil prices may very nearly overtake gasoline at the peak of this winter's pinch, thus reversing the old relationship of stepchild and pampered son in the petroleum industry.

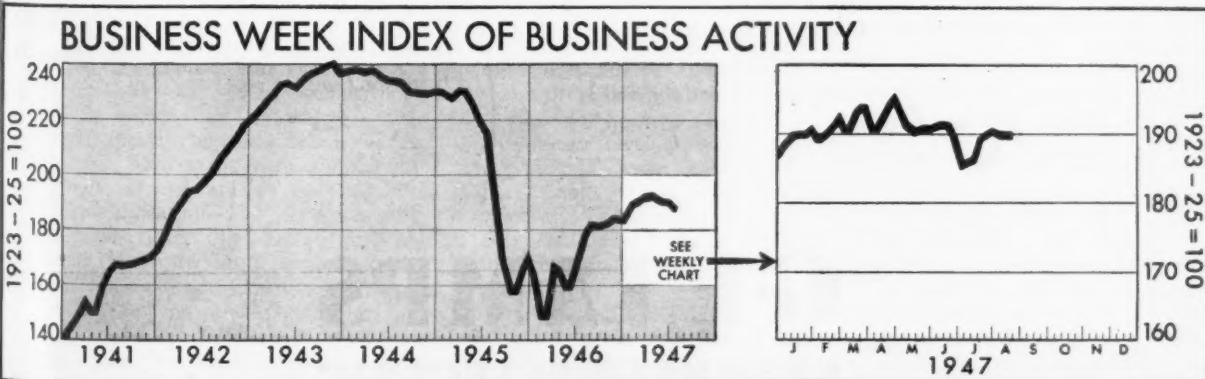
The trade press already reports one isolated instance of kerosene and fuel oils selling as high as regular grade gasoline, before taxes.

FIGURES OF THE WEEK

	\$ Latest Week	Preceding Week	Month Ago	Year Ago	1945 Average
THE INDEX (see chart below)	*190.3	†190.3	190.4	183.4	162.2
PRODUCTION					
Steel ingot operations (% of capacity)	93.4	92.8	94.4	89.4	97.3
Production of automobiles and trucks	84,739	†83,501	83,867	91,360	98,236
Engineering const. awards (Eng. News-Rec. 4-week daily av. in thousands)	\$17,229	\$15,724	\$17,443	\$17,734	\$19,433
Electric power output (million kilowatt-hours)	4,953	4,923	4,730	4,444	3,130
Crude oil (daily average, 1,000 bbl.)	5,153	5,159	5,084	4,836	3,842
Bituminous coal (daily average, 1,000 tons)	1,958	†1,968	2,017	2,011	1,685
TRADE					
Miscellaneous and L.C.I.L. carloadings (daily average, 1,000 cars)	85	84	83	84	86
All other carloadings (daily average, 1,000 cars)	66	67	70	64	52
Money in circulation (Wednesday series, millions)	\$28,239	\$28,223	\$28,145	\$28,365	\$9,613
Department store sales (change from same week of preceding year)	-6%	†-2%	+8%	+92%	+17%
Business failures (Dun & Bradstreet, number)	59	78	76	17	228
PRICES (Average for the week)					
Spot commodity index (Moody's, Dec. 31, 1931=100)	419.7	421.4	418.4	345.6	198.1
Industrial raw materials (U. S. Bureau of Labor Statistics, Aug., 1939=100)	266.2	268.3	268.5	203.3	138.5
Domestic farm products (U. S. Bureau of Labor Statistics, Aug., 1939=100)	375.2	374.5	374.0	307.3	146.6
Finished steel composite (Steel, ton)	\$75.41	\$75.41	\$69.14	\$64.45	\$56.73
Scrap steel composite (Iron Age, ton)	\$37.83	\$37.92	\$40.83	\$19.17	\$19.48
Copper (electrolytic, Connecticut Valley, lb.)	21,500¢	21,500¢	21,500¢	14,375¢	12,022¢
Wheat (Kansas City, bu.)	\$2.34	\$2.29	\$2.32	\$1.94	\$0.99
†Sugar (raw, delivered New York, lb.)	6.32¢	6.32¢	6.19¢	4.20¢	3.38¢
Cotton (middling, ten designated markets, lb.)	33.49¢	34.38¢	36.79¢	35.84¢	13.94¢
Wool tops (New York, lb.)	\$1.725	\$1.702	\$1.628	\$1.330	\$1.281
Rubber (ribbed smoked sheets, New York, lb.)	15.45¢	15.26¢	15.94¢	22.50¢	22.16¢
FINANCE					
90 stocks, price index (Standard & Poor's Corp.)	121.6	122.9	125.9	137.0	78.0
Medium grade corporate bond yield (30 Baa issues, Moody's)	3.18%	3.16%	3.17%	3.03%	4.33%
High grade corporate bond yield (30 Aaa issues, Moody's)	2.56%	2.56%	2.55%	2.51%	2.77%
Call loans renewal rate, N. Y. Stock Exchange (daily average)	1½-1½%	1½-1½%	1½-1½%	1½-1½%	1.00%
Prime commercial paper, 4-to-6 months, N. Y. City (prevailing rate)	1%	1%	1%	1-2%	1-1%
BANKING (Millions of dollars)					
Demand deposits adjusted, reporting member banks	46,780	46,574	47,187	45,504	††27,777
Total loans and investments, reporting member banks	63,646	63,513	63,513	68,423	††32,309
Commercial and agricultural loans, reporting member banks	12,301	12,238	11,883	9,343	††6,963
Securities loans, reporting member banks	2,047	1,975	2,020	3,417	††1,038
U. S. gov't and gov't guaranteed obligations held, reporting member banks	38,527	38,588	39,154	47,013	††15,999
Other securities held, reporting member banks	4,227	4,228	4,165	3,980	††14,303
Excess reserves, all member banks (Wednesday series)	790	850	700	805	5,290
Total federal reserve credit outstanding (Wednesday series)	22,636	22,494	22,093	24,109	2,265

*Preliminary, week ended August 23rd. †Ceiling fixed by government. 8Date for "Latest Week" on each series on request.

*Revised. ††Estimate (B.W.—Jul. 12 '47, p. 16)



Two ways to measure quality when you buy Fluorescent Lamps



1

One way. General Electric found, was to build the world's biggest double quartz monochromer. What's that? A super instrument that enables G-E Lamp scientists to speed up the accurate measurement of light waves and short ultra-violet radiation. The data thus acquired is a big factor in the careful color standardization of G-E fluorescent lamps. You'd have fun operating General Electric's monochromer—but you'd hardly have room for it in your budget or your cellar. It's easy, though, to get the full benefit of G-E Lamp research facilities without a penny of extra cost. Just . . .

2

Insist on the  monogram when you buy fluorescent lamps for home or business use. General Electric has been first with virtually all major improvements in fluorescent lamps. *And G-E Lamp research is always at work to make General Electric lamps even better and to make them Stay Brighter Longer.

G-E LAMPS
GENERAL  ELECTRIC

BUSINESS WEEK

NUMBER 939

AUGUST 30, 1947

New Home Costs are NOT out of Line



Your dollars today will buy more new home construction here in Seattle, than any other of the four major items on your family budget, namely: food, clothing, shelter, and personal transportation.

Compared with previous periods, the purchasing power of your dollar spent for a new home today brings you more value than when spent for food, clothing or an automobile. In other words, today's new-home building costs are not out of line with other postwar costs. They are, in fact, lower—as these figures for the last quarter of 1946, the latest available from the U. S. Bureau of Labor Statistics, prove.

As compared with the "base period" 1935-39:

Food costs were up 141.7%
Clothing costs were up 63.2%
Automobile costs were up 60.9%
General commodities (all items) were up 56.1%
Home building costs in Seattle were up 47.3%

A further advance in each of the above items has since been registered, exact figures not yet released.

Also, when comparing prices you have to pay in these postwar days, because of worldwide shortages and almost unlimited demand,

remember as well the greatly increased incomes of today. Again quoting from the U. S. Bureau of Labor Statistics:

All factory earnings, average per worker, are now up 105% from the 1935-39 base.

Retail clerks get 60.5% more. Building regulars, 50.5% more. The average worker's average daily wage is up 311%.

Now, for all of these wages and salary levels are the exchange-value of a new home, in the terms of their income, is actually less today than in 1935-39.

But come out today and look at the new homes, now in process of building or ready for final inspection, which Seattle's Home Building Industry has created. Judge for yourself that the quality of the construction, design and craftsmanship of the first quality.

As one of Seattle's leading banks recently stated in a public announcement in answer to the question, Is this a good time to buy a home? "There is just one good time to buy a home. That time is when you need it."

Our advice is—don't delay. Present indications point to higher costs, not lower. Your dollars used now for better living in a good home will prove your best investment.



SEATTLE'S HOME BUILDING INDUSTRY

Seattle Master Builders' Assn. Real Estate Board Lumber and Building Supply Dealers
Home Appliance Dealers Building Material and Equipment Producers Seattle Architects
Mortgage Bankers Residential Appraisers Building Trades Council American Federation of Labor.

BUILDER'S PLEA: A home building dollar is as good as any right now

Home Building Surges Again

Early-1947 slump reverses sharply as construction climbs even in summer, normally not a peak season for "starts." Main cause: Public tires of waiting for lower prices. But is it all just a flash in the pan?

The sad, slow music that was being played for home building late last winter (BW—Apr. 5 '47, p. 19) changed to a lively cadenza this summer. For residential construction definitely is on the increase; both starts and completions are notching upward.

• **First Indication**—The trend was first indicated when July figures, just released, bore out on a national scale what contractors had been experiencing locally. Footings were poured for the foundations of 80,000 new homes in July. And the last dab of paint was

brushed on 65,700 completed homes. Those figures are not only the best for any month in 1947; they far surpass those of 1946.

This week a survey by Business Week correspondents made it crystal clear that a definite resurgence in building is under way. The most conclusive proof is that traditionally there are fewer "starts" in summertime than in the spring.

• **Behind the Boom**—Why then did housing hit a bit of a boom? There seems to be no pat, single answer. But

there are some contributing factors:

- Probably the most important of all—and hardest to discern—is public psychology. It may well be that the American public has decided not to wait any longer for prices to come down, and is bulling the market.

- Construction of more residences for rent is another reason. Multiple-family dwellings of various kinds—apartment houses, flats, and duplexes—are being built in greater numbers.

- Higher priced homes—those above \$20,000 or \$25,000—are under construction in plenty of places for the first time in ages.

- Some house renters, who feel that they can't talk the landlord out of an increase, have decided to save their breath by becoming homeowners.

- Other possible reasons for the upsurge: the Federal Housing Administration emphasis on rentals; increased supplies of building materials; improved building codes.

- **800,000 This Year**—The Commerce Dept. now expects that total construction of permanent private houses this year will run close to 800,000. This is lower than the million predicted at the beginning of the year, when government stimulus still was assumed. But it is better by far than was feared in the late winter of 1946-47 when starts were low.

Actually, housing began to lift itself off its belly in March. Building began a sharp but definitely seasonal upturn at that time. It didn't seem to be anything to get excited about. It was a slower climb than last year.

Optimism didn't seem to be justified until June or even July. Then starts on new homes swept up to a new high—just at the time when they had been due to turn downward.

- **Flash in the Pan?**—Some of the old lieutenants of Wilson Wyatt, erstwhile peacetime housing czar, regard the present activity as a flash in the pan. They claim that they expected an upturn of about this dimension, based on the exhilaration of builders over removal of all building controls. They think it continued into August with 82,000 to 85,000 units.

But they think that this level of building is about to run smack into renewed materials shortages. The time it takes to build a home, they say, had shortened to about three months; but now it's lengthening out again. On this analysis, the ex-Wyatt people expect the boom to blow up in September. They think starts in that month may drop to as low as 25,000.

Reports from around the nation

show clearly that the spurt in building activity is fairly widespread. But conditions are not identical everywhere. From Business Week bureaus and correspondents, the information supports the idea of a rising trend:

Chicago—Residential building is improving steadily in Chicago. Very few completed houses are unsold. Biggest and best selling group is the \$7,000-\$10,000 bracket; there is also a good demand for the \$20,000-\$30,000 price group. Slowest movers are houses priced between \$13,000 and \$18,000.

Both Bell Savings & Loan and the Chicago Metropolitan Home Builders Assn. say that building permits and starts are practically equivalent: The lag between issuance of permits and starts is now only a week or so. They estimate that about 10% of the dwelling units are for rental.

Dallas—Residential housing construction is increasing in Dallas. The surge has come despite an approximate 15% advance in union labor costs on July 1, and an August increase in the price of lumber of all grades. There is some decrease in starts of units for sale but this is more than offset in starts on units for rent. Virtually no new houses are going begging for buyers. But there is some decrease reported in G.I. buying: Veterans are having trouble in getting

the valuations set on houses approved. • **Boston**—A distinct shift in the emphasis on residential construction has taken place in Boston. What is seen in Greater Boston is a potential apartment house boom, backed by FHA guarantees. From \$15-million to \$25-million worth of multiple unit housing is being started or is earmarked for starting within a matter of weeks. The trend in single family construction has shifted. Instead of the tiny 4½-room house for \$12,000, the stress is on the six- and seven-room house for \$20,000 to \$30,000, the pre-war luxury scale.

Financial institutions generally are shying away from home building until some sort of stability returns to prices. The First National Bank, which had 160 commitments for new construction at one time last year, now has only six commitments.

• **Philadelphia**—Earlier in the year new construction had been lagging in Philadelphia; builders were afraid that the market for high-priced row homes might suddenly dry up. They found themselves forced to charge anywhere from \$8,000 to \$10,000 for these, due to high labor and materials costs. It turned out to be far more than many potential buyers ever would pay for a row house.

But there is now a belief among builders that prevailing conditions will

continue for two or three more years. So they are accelerating home construction.

Down payments on houses are very often well above the minimum requirement. And there are many sales for cash. One builder reports that every fourth buyer exceeds his down payment.

The Main Line is experiencing its biggest building boom in 27 years. Houses being built there range from \$10,500 to \$47,500.

• **Seattle**—Sales of new construction in Seattle had slowed almost to a halt by the end of spring. There were virtually no new starts in May and June when the full weight of the buyers' strike was felt. At that time there were about 3,000 new, completed homes unsold. On a few houses plagued with delays, prices dropped sharply. But they held steady for the bulk of new housing.

Builders could see no prospect of lower construction cost so they decided to break the stalemate. The industry opened a newspaper advertising campaign (picture, page 15). Theme: Costs of new houses are in line with other prices and are more likely to go up than down. Result: Sales picked up in July, and now about half of the 3,000 homes have been sold. So the campaign, originally launched with a \$15,000 budget for 13 weeks, is being extended. Additional groups are joining with builders and mortgage firms to contribute funds.

Largest development company in the metropolitan area—Carroll, Hillman & Hedlund—sold 129 houses in July and 53 in the first three weeks of August. Now, instead of completed small homes on its hands, it has a waiting list.

New starts have stepped up, but not as briskly as they could.

• **Birmingham**—Building of individual houses in Birmingham is still going at a snail's pace. But approximately 1,600 apartment units have been started in the area within two months.

The apartment building program is presently occupying builders' attentions almost exclusively. What few dwellings are going up are scattered; no large-scale new projects are in sight. Some individuals are building homes for their own occupancy. But the emphasis has been shifted to construction of "garden type" apartment projects for rent.

• **San Francisco**—Building permits in San Francisco showed increases in both June and July. The Associated General Contractors reports that home starts have jumped with both single-family dwellings and flats projected.

A large number of residences were unsold a few weeks ago. But very recently sales have picked up. One firm reported selling 29 homes during the first week end of August—more than they sold in two weeks in June.

Some builders find that buyers show a special interest in two-family houses.



MINGKWAII shows its innards



INVENTOR Lin Yutang shows how

Chinese Typewriter: A Real Character Study

With each written word an individual symbol, Chinese has always been a tough language for typewriter manufacturers.

Lin Yutang, Chinese author, offers his solution: the Mingkhai, (clear-quick) typewriter, which took him 30 years to devise.

It has 72 keys, 36 upper and 28 lower ones representing the top and bottom sections of Chinese characters. Pressing both an upper and a

lower key brings into position a "unit" of eight words which fall in the same category. The typist sees all eight, selects the one she wants by pressing one of eight keys.

Lin's machine, now in the prototype stage, can print 90,000 Chinese characters. What's more, it can type English, Russian, and Japanese. Previous Chinese typewriters handled only 5,400 symbols (BW-Jul.13'46, p44).



WHEAT APLENTY, and high prices, push up farm incomes; behind the price trend lies a lean corn crop

Counting the Crops in Cash

Declining prospect for big corn harvest means farm income probably hold up in 1947, may even increase. Outlook for 1948 depends on how much consumers will pay for meat.

The businessman trying to forecast effect of declining corn prospects on purchasing power can start with fairly safe assumptions:

Income in the final months of
will probably hold up, and per-
will markedly increase.
Farm income in 1948 will de-
on how far consumers are willing
to bidding up a decreased supply
of livestock.

447—From now to the end of the
is the period for which economists
pretty generally forecast a decline
farm prices. Deterioration in corn,
to the last few days' rains, gives
a reason to reverse their field.
Continued strong domestic demand and
need for food abroad are other in-
-cess; most agricultural economists
consistently underestimated them.
combination of causes ran Sep-
tember futures in corn and oats to all-
highs in Chicago last week before
rains caused Monday's turnaround.

Strengthening of farm prices the last 6 months means that the agricultural industry in 1947 will receive for its products somewhere near \$28-billion. In 1946 that amount was \$24.5-billion. This 15% increase could be even greater if the corn outlook gets worse. The hog and cattle feeders are concerned; their feed crop is gone, they may begin a liquidation of livestock. But unless the crop does get markedly worse, such liquidation is likely to be temporary. There is a big holdover of corn. Farmers know, too, that there is plenty

of wheat in the West—which they may get at a price and at Europe's expense.

of livestock in 1947, it will adversely

100% CORN
SEP 2396, 240 DEC 2212.5 MAY 2116.0
9/16

CORN PRICES, boosted by the long drought, chalked up record highs last week in Chicago. Then the rains came and prices slid off—but not very far.

affect the farmer's income in 1948. And even if the liquidation is minor, the corn crop estimate released Aug. 21 should cause stockmen to cut output for fear of high-priced feed next year.

This year's corn makes next year's meat and a considerable part of next year's dairy products, poultry, and eggs.

When corn conditions first began to make forecasters nervous, they estimated that a crop of 2.8-billion bu. would allow as much livestock production as in 1947. The Aug. 21 estimate put the crop at 2,437,000,000 bu., down 14% from the "break even" point on livestock production.

- **Slaughtering Is Borrowing**—Butchering the livestock population down to fit the crop might make farmers and feeders an extra billion dollars (at going prices). But most of this would simply be borrowed from the future in the form of smaller numbers to be marketed thereafter.

Livestock products totaled more than half of all farm income in 1946. If income from these sources holds up in 1948, it will be because consumers are willing to pay more money for fewer chops and roasts.

• **Dairying**—The 1948 outlook for dairying is even more questionable. Large production areas such as the New York milk shed are far from the base of feed grain supplies. Much of this year's corn will not be worth grinding as feed. If the pinch becomes great enough, dairymen can be counted on to go to Washington for relief in the form of wheat allocations. Even with a hay crop 8% better than the average, dairymen know their position is insecure. Both output and income might well decline next year.

But the big commercial producers of poultry and eggs will be in a position much like that of dairymen. They may join the clamor for wheat allocations.



ON THE LINE: W. R. Triem talks as he rides; the operator places the call

Mobile Phones for the Traveling Public

Telephone service for railroad passengers is off to a flying start on the New York-Washington run. W. R. Triem (left), Pennsylvania R.R. telegraph superintendent, with the help of the Congressional's operator, puts through a demonstration call to Baltimore & Ohio R.R.'s crack train, the Royal Blue. Shortwave radio

beams the voice to the nearest receiving station of Bell System's mobile telephone service. From there, land wires transmit it to the telephone called. The charge: about 30¢ to 40¢ for the first three minutes in a 20-25-mile radius. New York Central and Chesapeake & Ohio plan similar installations.

Camera Future

It lies in industrial uses, industry believes, despite boom in amateur photography. War brought many new applications.

Amateur photography as a hobby is still growing in popularity. Camera fans' demand for films, cameras, and photographic equipment still seems unending (BW-Jun.28'47,p24). But photographic manufacturers attending the annual meeting of the National Assn. of Photographic Manufacturers in Chicago this week predict that the industry's big future lies in development of its potential uses as a tool for industry and science.

N.A.P.M. estimates that nonamateur uses of photographic materials already account for two-thirds of the industry's total production. Eastman Kodak Co., giant of the industry, puts nonamateur purchases of its products at close to half its total sales.

• **New Jobs**—Wartime production demands accelerated the prewar trend

toward wider industrial uses of photography. Now war-developed methods and techniques are finding new jobs in peacetime industry and business. They include such applications of photographic processes as:

(1) Photoanalysis of materials, by both X-ray and spectrographic photography, for strain analysis, internal flaw detection, and quality control;

(2) Instrument recordings;

(3) Microfilming of records;

(4) Making of phototemplates for reproduction of blueprints and engineering data;

(5) High-speed photography for the study and analysis of motion too fast for the human eye to report.

• **Special Division**—To develop more industrial uses, Eastman created last spring a special Industrial Sales Division to handle all industrial applications of its products.

Eastman executives see three main fields for future applications of photographic processes:

(1) The graphic arts, where research into the possibilities of using photographic negatives in printing processes to eliminate type-setting and stereotyping is a major enterprise;

(2) Television, where motion-picture records of programs, both for permanent recordings and for broadcast, will be a necessity;

(3) News pictures in color, weekly news magazines, when developing methods for color pictures can cut processing time required to the present six or eight weeks a week or less.

• **Other uses**—High on the list of expanding uses of photography are medical photography, business training and sales films, educational films.

Microphotographs in color are possible more detailed study of diseased tissue by doctors and scientists. Motion pictures of unusual and complicated operations for teaching purposes are becoming more common.

Success of Army and Navy training and propaganda films during the war stimulated expanded use of both motion picture and sound-slide films in business and industry. Nearly 4,000 customers are now reported to use these production training, sales training and sales promotion.

In the educational field, about 100 companies make films for school and college use. Wider distribution of projectors in schools is expected to increase demand.

• **Catching Up**—Wartime shortages of photographic materials and equipment are slowly disappearing. Although production is at record high levels, it is still short of demand. But photographic papers, cameras, and accessories are in fairly adequate supply.

A NEW ATOMIC PILE

The Atomic Energy Commission has revealed the existence of a radically new atomic pile. Successful operation of the new pile, which has been running at Los Alamos since last November, marks an important step toward the solution of several key problems in generation of useful power.

The new pile is essentially an atomic bomb in which the chain reaction is controlled.

It is the first to use plutonium instead of uranium as its fuel. It is the first to employ fast neutrons instead of slow. It is the first to operate without a moderator to slow the neutrons.

The primitive piles built during the war operated on natural uranium containing only a tiny percentage of the fissionable U-235 isotope. In consequence, they just barely ran. And they required hundreds of tons of uranium and moderator.

By contrast, the new pile, consisting almost pure plutonium, requires only a comparatively few pounds of material. And the "flux density" is high—that is, there are plenty of slow neutrons.

Oil's Recurrent Crises

Industry has got by the summer driving season without expected gasoline shortage. But the winter fuel-oil problem is coming up. Transportation chief bottleneck. Consumer aid asked.

Oil companies the nation over were breathing a little easier this week. The summer vacation period has all but ended—with no major gasoline shortage crisis. And gasoline demand will begin to slacken with the arrival of September.

New Worry—But it's out of the frying pan and into the fire for the oil people. Fuel-oil demand, both domestic and industrial, will begin to rise with the approach of winter. Whether the nation—and most specifically the Midwest—can avoid a fuel-oil shortage depends largely on the weather. Given a normal winter, the industry thinks it can squeak by. But a long or intense cold spell is bound to create spot shortages.

Unprecedented demand—higher than the wartime peak—and inability of the industry to expand its transportation facilities have combined to bring about the current near-crisis (BW—May 17 '47, p48).

Peak Demand—The Bureau of Mines estimates 1947 total demand (including exports) at 5,733,000 bbl. a day. This is 7% over the 1945 wartime high and 7.7% above the 1946 level. (Export demand actually is lower this year than last; 397,300 bbl. a day vs. 413,500.)

Reasons for the increased call for petroleum are manifold: Motor vehicle registrations have risen to 38-million, a gain of 1.6-million since the end of 1946; military requirements continue to surge; industrial needs for lubricating oil will amount to 16-million bbl. this year against 14.3-million bbl. in 1946; farm tractors are going to use 2.8-billion bbl. of fuel this year against only 1.5-billion bbl. last year; demand for diesel engine fuel will total 62-million bbl. this year, 150% over the 1941 level; there are now 3.1-million domestic oil burners in use, compared with 2.8-million at the end of 1946.

Enough—The oil supply is adequate, industry leaders contend. The American Petroleum Institute estimates the aggregate supply (including imports, natural gasoline, and benzol) at 5,812,000 bbl. a day—more than enough to meet the estimated demand. Over-all refining capacity also is adequate, A.P.I. says.

What is lacking then is pipeline capacity to move crude oil from producing areas to refineries. In some instances also, transportation facilities are inadequate to get finished prod-

ucts from refineries to consuming areas.

Major difficulty in the Midwest stems from the drop in crude oil output in that region. In 1941, Michigan and Illinois wells produced 407,500 bbl. a day; now they are running around 230,500 bbl. a day.

• New Facilities—New pipeline capacity is being built. Late this year lines carrying 60,000 bbl. a day from west Texas to the Midwest will be completed; lines to carry another 250,000 bbl. a day will be finished next year.

To meet rising demand for its products, the petroleum industry is spending a record \$4-billion during 1947 and 1948 for new facilities. This includes:

(1) More than \$2-billion for production of oil. (Some 35,000 new wells will be drilled this year, a record.)

(2) Another \$1.1-billion to increase refinery capacity by 450,000 bbl. a day; these refineries will take from 6 to 24 months to build.

(3) Some \$440-million for pipelines and other transportation equipment.

(4) About \$480-million in new marketing facilities.

• No Immediate Aid—Little or none of this effort will help solve the immediate supply problem. So the industry is turning to consumers for aid.

In petroleum refining, gasoline and fuel oils are produced simultaneously. Fuel oil produced in the summer is stored to help meet winter peak demands. With refinery operations at high level, companies today are running short of storage capacity for fuel oil.

• Cooperation Sought—Consumers are therefore being urged to fill their own fuel tanks, and keep them filled. This will enable the industry to store more fuel oil against next winter's requirements.

Householders also are being urged to "maintain moderate temperatures in homes" during the coming heating season.

Drive for Foreign Crude Headed by Davies

The move of independent oil companies for a share of the rich foreign crude oil supply (BW—Jul. 26 '47, p6) came out in the open last week.

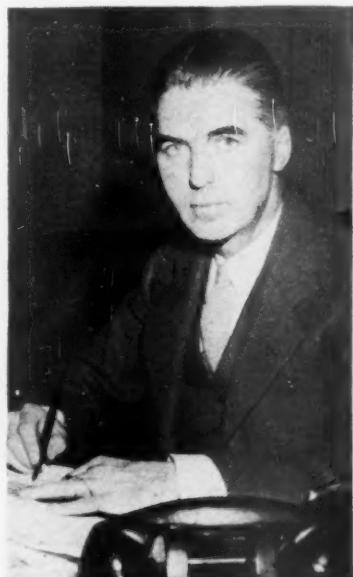
• Organized Independents—Eleven independents organized American-Independent Oil Co., put up \$10-million of the authorized \$100-million capital. Announced purpose: to "engage in foreign petroleum operations, particularly in the Middle East."

President of the new concern is Ralph K. Davies, one-time senior vice-president of Standard Oil Co. of California, wartime deputy petroleum administrator. Oil men generally hold Davies in high regard. One reason: He knows his way around Washington—an important asset where foreign oil is concerned. As one western oil man said: "Davies knows the State Dept. like no one else in the industry."

Significantly, the two offices of the new company will be in San Francisco, Davies' home, and Washington, his favorite arena.

• Participants—Companies joining in the venture claim assets exceeding \$1-billion. They include: J. S. Abercrombie, Houston; Allied Oil Co., Cleveland; Ashland Oil & Refining Co., Ashland, Ky.; Globe Oil & Re-

fining Co., Wichita, Kan.; Hancock Oil Co., Long Beach, Calif.; Honolulu Oil Corp., San Francisco; Los Nictos Co., Los Angeles; Phillips Petroleum Co., Bartlesville, Okla.; Signal Oil & Gas Co., Los Angeles; and Sunray Oil Corp., Tulsa.



Ralph K. Davies

Apollo Steel Syndicate Buys Ingot Mill

In a move to beat the steel shortage, a group of 25 U.S. manufacturers last winter leased the Apollo Steel Co. from a Detroit syndicate which had just bought it (BW-Dec. 21 '46, p16). At the head of the leasing group was Arnold H. Maremont, vice-president of Maremont Automotive Products, Inc., Chicago (BW-Apr. 26 '47, p110). The outlook for their plan was so bright that the Maremont group soon bought Apollo outright.

• **Another Purchase**—This week Maremont announced that his syndicate had made another purchase to fill in a gap in production. It bought the Phoenix Iron Co., an ingot-producing steel mill at Phoenixville, Pa., for about \$4-million. The purchase was made to supply ingots for the sheet mill at Apollo, Pa.

The mill has a capacity of 30,000 tons of ingots a month, has six openhearth

furnaces, three rolling mills. Its new owners believe that it will provide enough steel to enable all of the group's manufacturers to operate at full capacity—and sell excess steel to other consumers. Said Maremont: "The mill was purchased in the conviction that a steel shortage exists and that it will be of three or four years' duration at least."

The management of the Phoenixville mill will be retained.

BOBBY-PIN OPENER

The "Bobopen" is a little plastic gadget that women can hold between their teeth to open bobby pins, instead of opening the pins with the teeth themselves. It is the product of four Colorado Springs dentists, a father and three sons named Cogswell, who run a dental clinic. It will go on the market this fall, will sell for 25¢.

The Cogswells found that more than 90% of their women patients had ugly notches in their upper front teeth. So they looked for the reason,

came up with "bobby-pin notch" wrote about it in dental journals, invented the Bobopen as a preventive. The plastic handle gripped by the teeth doesn't nick them like the steel of the bobby pin.

Thrift Novelty Co. of Denver is marketing a bobby-pin that can be opened with one hand, another answer

FORD FALLS IN LINE

When General Motors took the lead in boosting auto prices early this month, it was a foregone conclusion that most of its competitors would go along (BW—Aug. 9 '47, p18). But many thought the Ford might resist; it had cut prices earlier in the year (BW-Jun. 18 '47, p15), but reiterated its desire to hold out against further increases.

This week that doubt was resolved. Ford announced that "the simple necessity of keeping [the company] on a sound economic basis" dictated price rises from \$20 to \$229 in its Fords, Mercurys and Lincolns, effective immediately.

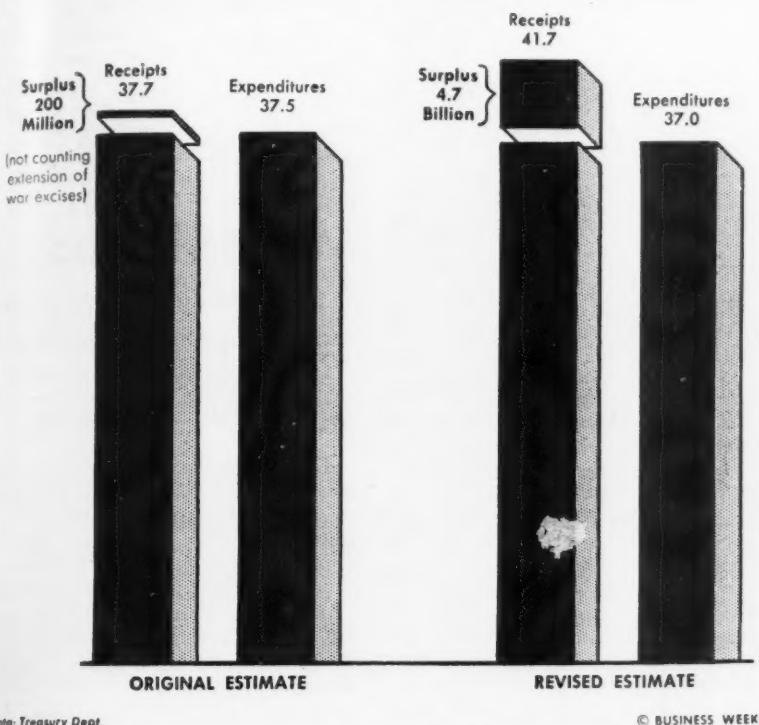


SOLID FOR SOLIDARITY

At the Inter-American Defense Conference at Brazil's Petropolis, key men in U.S. foreign policy put their heads together. They are (left to right): Ambassador to Brazil William Pawley, Assistant Secretary of State Norman Armour, Sen. Tom Connally, Sen. Arthur Vandenburg, Secretary of State Marshall.

Their chief troubles have been economics and Argentina. Secretary Marshall kept the conference on the political track by stating that aid to our Good Neighbors must be deferred; that aid to Europe has priority. His influence was felt also in the defeat of Argentina's proposal to make a lone veto upset any collective action against an aggressor within the Americas. The economic issues may be slated for a special conference in 1948.

Revised budget estimates for fiscal 1947-48 give a new picture of federal receipts, expenditures, and surplus.



Data: Treasury Dept.

© BUSINESS WEEK

Floor Under Federal Spending?

Revised budget for fiscal '48 estimates outlays at \$37-billion. And it looks like the next year's won't be much less, unless world situation improves sharply, or Congress really economizes.

President Truman's midyear review of the budget makes one thing clear: In spite of all the huffing and puffing—in Congress and elsewhere—the federal government will spend a total of at least \$37-billion in the fiscal year ending June 30, 1948.

• **Normal?**—Another fact emerges with a little reading between the lines: The next budget—fiscal 1949—probably won't be much smaller than this one. In other words, it begins to look as though \$37-billion or thereabouts is not far from the "normal" postwar level of federal expenditures. Only a sudden improvement in the international situation or an economy program considerably more effective than the one Congress tried to put into effect this year would make any real difference in the picture.

Congressmen used their blue pencils unsparingly on the 1948 budget. The government bureaus, almost without exception, howled that they were being reduced to a bread-and-water diet. And yet the revised estimates, just released, show only half-a-billion less in

federal expenditures than the \$37.5-billion budget Truman sent to Congress last January.

• **Changes**—This new total is the net result of several major changes:

(1) After submitting the January budget, Truman made additional recommendations that added some \$638-million to the expenditures he proposed for fiscal 1948.

(2) Transfers of expenditures between fiscal years (for instance the unexpectedly rapid withdrawals against the British loan) hiked the total by about \$354-million.

(3) Revisions initiated by Congress resulted in net cuts of \$1,520,000,000.

(4) Congress whacked another \$832-million off the January estimates, but Truman refuses to consider this cut as permanent. His revised budget assumes that it will have to be restored by deficiency appropriations.

• **Split-Up**—Percentagewise, the distribution of expenditures among the main items is about the same in the new budget as in the January version. Na-

tional defense expenditures, \$10.4-billion, account for 28% of the total budget. Interest on the public debt and tax refunds come to nearly 20%. Veterans' pensions and benefits take another 20%. International affairs and assistance to other countries will take about 12%. This leaves only 21% (\$7.6-billion) for all the other functions of the government.

The only thing that looks like a silver lining in the revised budget is the estimate of receipts. In January, Truman predicted that the government would take in \$37,730,000,000 during fiscal 1948. Now, he has raised his sights to \$41,667,000,000. About \$1.1-billion of the extra revenue will come from the continuation of the wartime excises, which Congress voted to extend indefinitely. The rest arises from the big increases in incomes and prices, which automatically boost tax yields.

• **Next Year?**—The midyear review says nothing about the 1949 budget. The Administration won't tip its hand on that until next January. But Truman's stress on the fixed items in the budget makes it plain that he doesn't expect expenditures to drop substantially after this year.

National defense spending probably will stay around its present level unless the world settles down abruptly. Unification of the armed services will bring some economies, but these would be more than canceled if Congress passed a universal military training bill (estimated cost: \$2-billion).

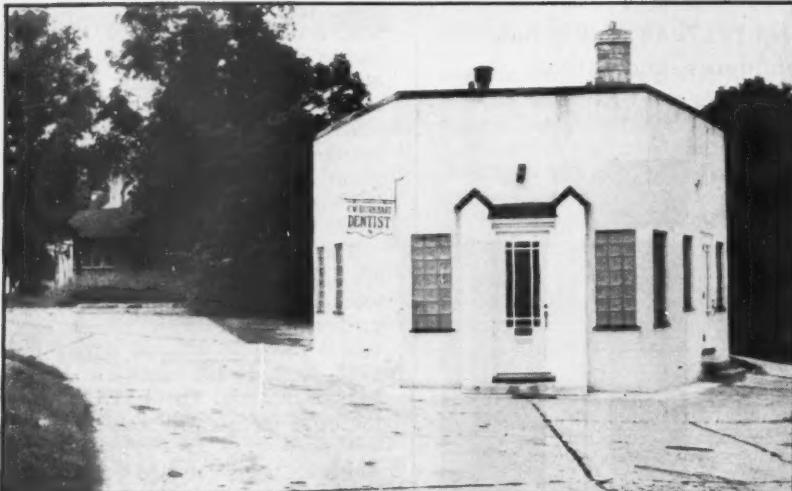
Veterans' payments might taper off as ex-G.I.'s use up some of their educational and employment benefits. But the hike in subsistence allowances to veterans in school and an increase in on-the-job ceilings—both certainties—will keep the total up.

Interest on the public debt will remain about the same—might even rise if the Treasury pushes its plans to unpeg short-term interest rates (BW—Aug. 23 '47, p91).

International finance still is a major question mark. But the Administration is figuring on \$3-billion to \$4-billion a year as the probable cost of keeping friendly countries on their feet.

• **Forecast**—One thing with another, the budget that Truman will send to Congress next January probably will look something like this in comparison with the current estimates (billions of dollars):

	1948 Official Estimates	1949 Unofficial Estimates
National defense...	\$10.4	\$10.0-\$11.0
Veterans	7.5	7.5
International affairs...	4.3	3.0- 4.0
Interest on debt...	5.1	5.1
All other	9.7	9.5
Total	\$37.0	\$35.1-\$37.1



FILLING STATION—once for automobiles, now for teeth. A Minneapolis dentist, desperate for office space, takes over a former gasoline station.

No Vacancy

Office space is still nearly as tight as during the war. High costs prevent new building—the only real solution.

When it came to finding office space during the war, many a U. S. businessman was as hard put to it as if he were trying to find a place to live. Federal agencies moved into big cities all over the country, took whole floors or sometimes whole buildings. Wartime prosperity added to the squeeze: More new businesses were set up, old ones expanded.

• **Little Improvement**—Today, two years after the war's end, the situation is nearly as bad as ever. Space which is available in most cities is in third-rate or obsolete buildings—and the rent comes high. To avoid park benches, some tenants have had to move into anything with four walls and a roof—like the Minneapolis dentist who took over an abandoned gasoline station (picture). The real relief—new buildings—is still a long way off because of high construction costs (BW—July 1947, p31).

Here is the office space picture in some of the major cities, as reported by Business Week correspondents:

Baltimore. The key to rentable office space here for the past ten years has been the federal government. Total federal employees in Baltimore right now would fill four buildings the size of the 34-story O'Sullivan skyscraper—the city's biggest. Thus the situation is as tight now as during the war.

Boston. Shutdown of some federal agencies has made more office space available recently. But it's immediately

snapped up; waiting lists are so long that the pressure hasn't slackened. And since no office buildings have gone up in Boston in 25 years, space is generally available only in obsolete buildings.

Detroit. Downtown buildings are nearly 100% occupied. Most have long waiting lists.

Cleveland. Occupancy is the highest in history—better than 99%. Rents range from \$1.50 a sq. ft. in least desirable buildings to \$4.50 in choice locations. There have been no new buildings since 1931. None are contemplated because of prohibitive construction costs.

Cincinnati. Liquidation of government agencies has loosened the situation just a bit. But it is next to impossible to rent the entire floor of any downtown building, absolutely impossible to get space of any kind in the best locations.

Kansas City. Occupancy is 97%—with long waiting lists. Most of the lists are made up of tenants who want to expand. Nothing is a-building. The federal government has bought the 33-story Fidelity building—thereby making the squeeze even tighter; a local group is fighting to kill the deal.

Oklahoma City. Consolidation and removals of federal agencies have relieved the squeeze somewhat. Also helpful: remodeling of the former Shrine Temple into office space. On advance notice, reasonably large blocks of space can be had.

Denver. Office space is easing. Reason: The big Denver Ordnance Plant outside the city proper has been taken over by the federal government. By Oct. 1, about 4% of total city office space will be available, as against less than 1% during the past four years.

San Francisco. Office space is as close to 100% as it can get. For every square

foot of space relinquished by the government since the war, there have been more takers than there is room for.

Philadelphia. About 99% of available space is occupied. Most vacancies in the other 1% are undesirable for most businesses. Some relief will develop when the central office of the Immigration & Naturalization Service moves back to Washington. But no date has been set for them to vacate the Franklin Trust Bldg.

Marker Inroads

Tombstone industry reports record sales. But competition of mausoleums, living war memorials, cremation is growing.

Executives of the monument industry, meeting in New York last week, came to grips with difficulties facing a record market in tombstones. Sponsor of the gathering were the American Monument Assn. (manufacturers and wholesale quarries) and the Monument Builders of America (retailers).

• **Record**—Spokesmen reported that the monument business has reached an annual retail total of \$110-million. The prewar figure was \$55-million to \$60 million. Obvious factor in the increase is general prosperity. This is not only evident in expenditures for current burials: Many families have added gravestones for members who died during the slump when money for suitable stones was scarce.

However, the 40,000 persons who make a living from the monument business have things to worry about. According to one spokesman, the no-monument cemetery has cost the memorial industry "a quarter of its customers or more." He refers to the memorial-park cemetery; this type of graveyard requires that all graves be flat.

• **Competition**—Memorial parks are not represented in the tombstone organizations. Neither are the companies which do a mail-order business in tombstones. Biggest is Sears, Roebuck & Co. Its current main catalog advertises a special "new memorial catalog." Offered are granite, marble, and bronze monuments in 100 models at "amazing savings."

Sears gravestones are sold delivered-and-erected. The main catalog quotes prices as low as \$52.50 on this basis. But local monument companies say they're undisturbed by mail-order competition. They contend that the personal contact provided by the local dealer more than offsets the cold-blooded argument of price.

• **More Competition**—Serious threats to the organizations were listed by Frank N. Yogerst, president of Liberty Granite

EVERYONE HAS A STAKE IN EMPLOYEE SECURITY



THE "PROTECTED PAY ENVELOPE"
BENEFITS EMPLOYEES

Is your reputation on trial, too?

Father, of course, knows how to fix reels and everything else . . . or at least he's supposed to. But somehow, even against such odds, his reputation with Johnny seems to keep intact, perhaps because his "public" is prejudiced in his favor.

Most of us in business have to build reputations on the basis of performance alone. When an organization enjoys a reputation of being "a good place to work" you can usually put your finger on clear, progressive thinking and action on the part of management. In many cases credit has been given by management to Connecticut General's Protected Pay Envelope Plan for helping materially to build employee and

community goodwill. This plan in its entirety includes Group Life, Accident and Sickness, Hospital and Surgical Expense insurance and a Retirement income for employees. It may be purchased in part or as a whole, depending upon organization needs.

One plan for every need? That obviously doesn't make sense. What you want is a plan for *your* organization . . . and that is why Connecticut General has developed the new "Employee Security Analysis," to give you a complete picture, a comprehensive analysis of the needs in your case before discussing any recommendations. Your nearest Connecticut General Office will be glad to discuss details with you.

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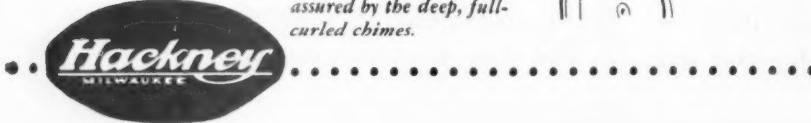
EASIER and FASTER to handle— that's the HACKNEY KEG!

• Stop and think for a moment how many times a beer keg is "handled" in one trip. It makes you appreciate the economies of the **easy-to-handle** Hackney Keg. It's light in weight . . . so light that drivers can handle it with a minimum of time and effort. But at the same time Hackney Kegs are strong . . . their steel construction is well able to withstand the bangs and jolts that are a part of modern handling. Be sure to get full details today.

MODERN HACKNEY KEGS ARE DESIGNED TO MEET YOUR NEEDS

- Greater handling ease and economy
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- Less storage space, less truck space
- Low maintenance charges
- Easy to keep clean and sanitary
- Guard beer quality
- Accurate capacity

Your requirements govern the design and construction of Hackney Kegs. For example, they are easier to handle because a good, positive grip is assured by the deep, full-curved chimes.



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CONTAINERS FOR GASES, LIQUIDS AND SOLIDS



ON N. Y. LIFE BOARD

For the first time in its history, New York Life Insurance Co. has a woman on its board of directors. She is Mrs. Douglas Horton, the former Mildred McAfee. Her election, the company points out, is in recognition of the growing importance of women to the insurance business both as policyholders and as beneficiaries. For example, in 1946, a fourth of all new New York Life policies purchased—or roughly 70,000—were bought by women.

Mrs. Horton was in the lime-light during the war: As Capt. McAfee, she was director of the Waves. Before that, she was president of Wellesley College.

Co., St. Cloud, Minn. In addition to the no-monument cemeteries, Yogerst cited mausoleums, the cremation industries, and living war memorials.

A storm that apparently has blown over involved imported gravestones. Some months ago the Granite Cutters International Assn. (A.F.L.) threatened to strike against working on partially finished stones shipped here from Finland, Sweden, and Scotland. The trouble subsided because importers switched to stones that were rough or completely finished.

• **Added Boost**—Monument companies came through the war with less dislocations than might be expected. Most workers are old craftsmen who (like silversmiths) couldn't be retrained for war jobs. The postwar period brought an extra dividend. This industry is a major beneficiary in the federal government's \$187-million program for returning the war dead (BW—May 17 '47, p.22). About 80% of the 328,000 bodies will be brought back. Most will be reburied in the 20,000 to 30,000 private cemeteries.



Let's Wake Up Rip Van Winkle!

Millions of bushels of food may rot in our fields this harvest time, instead of being available to the world's markets—because we are short of freight cars. Here is a way that thousands of cars can be freed for service in a hurry.

ARE you interested in the price of food? Does it give you a twinge to see those pictures of mountains of wheat piled on the ground and potatoes going to rot—when there's a desperate world food crisis?

The bottle-neck is our freight-car shortage. But thousands of cars could be freed by a single decision—if old-line railroad managements would act.

Don't Blame the War!

This is hard to believe, but it's true: we have today only three-fourths as many freight cars in our country as we had twenty years ago. This shrunken fleet is now called on to handle the greatest peacetime traffic in history. And the war itself is not to blame for the shortage—for in no single year from 1925 to the start of hostilities did the railroad industry buy as many cars as it junked. Twenty years is a long time for even Rip Van Winkle to sleep!

What Can Be Done?

There is at least one remedy that can be applied at once—despite the steel shortage and other difficulties in car-building. This remedy requires no new equipment, no period of time—nothing but an act of management:

Lift what appear to be agreements between railroads that deliberately slow down freight trains!

Here is an example. There are eight important routes by which you can ship "fast" freight from California to Chicago. These routes vary in length as much as 450 miles. But, curiously, the time schedule for each of the eight is exactly 118 hours—and 30 minutes!

Similarly, scheduled freight trains moving west over the important routes from Chicago to the Coast areas, despite great differences in terrain and mileage, take exactly 130 hours—on the nose!

Is This Free Competition?

Could it be that these schedules are fixed by agreement? That the trains



Are old-line managements asleep in the dell while many freight trains creep at a snail's pace—by agreement?

which could be fastest are held back for the slowest—so that no road can have even the slightest competitive advantage?

Railroad men know that, in many instances, a whole day could be cut off these schedules between California and Chicago—if managements would simply order it. If that were done, on these roads and on others, it would ease the national car shortage at once!

There is good reason to believe that by lifting deliberate freight slowdowns, on the roads that still practice them, we could provide more cars this summer and fall than our shops can possibly build. And every car is desperately needed!

A Call For Action!

The next few weeks will be the critical ones in our food problem. Our wheat crop is estimated to exceed any previous record by 300 million bushels. It is even now being piled in the fields—for want of cars.

If you feel as strongly about this as the C&O does, write to your newspaper and your congressman.

Ask them to stir up Rip Van Winkle—and tell him that time is short. Demand that our trains be scheduled not merely to suit the private deals of the railroads, but so that we can make the best use, for the whole public, of our depleted stock of freight cars!

The Chesapeake and Ohio Railway

Terminal Tower, Cleveland 1, Ohio

POWER FOR TRUCKS THAT MUST WORK—



24 hours a day... EVERY DAY!

Illustrated above is a material-handling job for which trucks must be kept on duty 24 hours a day, every working day. It is the kind of job in which battery industrial trucks excel because of their dependability and economy.

With batteries exchanged two or three times a day, the truck is kept continuously supplied with power. While one battery is being charged, another operates the truck.

IDEAL POWER CHARACTERISTICS

The truck starts instantly, accelerates smoothly; operates quietly; gives off no fumes; consumes no power during stops. Thus, it makes efficient use of power, and the current used for charging its batteries is the lowest-cost power available. Its electric-motor drives have a minimum of wearing parts and are inherently simple and trouble-free.

A battery industrial truck is most dependable and most economical when powered by EDISON Nickel-Iron-Alkaline Batteries. With steel cell construction, a solution that is a natural preservative of steel, and a fool-proof principle of operation, they are the most durable, longest lived, and most trouble-free of all types of batteries. *Edison Storage Battery Division of Thomas A. Edison, Incorporated, West Orange, New Jersey. In Canada: International Equipment Company, Montreal and Toronto.*

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STORAGE BATTERIES

IN INDUSTRIAL TRUCKS, EDISON NICKEL-IRON-ALKALINE BATTERIES GIVE YOU THESE IMPORTANT ADVANTAGES

They are durable mechanically; they can be charged rapidly; they withstand temperature extremes; they are foolproof electrically; they can stand idle indefinitely without injury; they are simple and easy to maintain.

Two Radio Deals

Philco takes over its supplier of refrigerators, while Garod Radio Corp. goes to a Chicago appliance maker.

The war-stimulated trend toward corporate mergers (BW—Nov. 10, p68) continues unabated. The latest involve two radio manufacturers: Philadelphia's Philco Corp. and Brooklyn's Garod Radio Corp.

• **Close Tie Closer**—Philco has acquired a refrigerator manufacturer, the Rex Manufacturing Co., Connersville (Ind.). The deal riveted firmly an already close tie between the two. Philco has been taking the entire Rex output since the radio company first put refrigerators on the market in 1938. And even before the merger, Philco had an investment of \$973,000 in Rex's preferred stock.

Under terms of the merger, Rex stockholders will get 51,993 shares of \$3-par Philco common stock. Philco will make no changes in its subsidiary's operation or management.

• **Financing**—The Rex purchase is only one step in a general Philco expansion program, already well under way. To help finance it, Philco last month offered 100,000 shares of preferred stock at \$101.50 a share.

Philco's expansion has heavily stressed refrigerator production. To step it up, Philco last year bought a Philadelphia war plant from the government, sank into it some \$7-million in all. In 1946 refrigerators accounted for some 25% of the firm's business and this year Philco expects the percentage to be even higher.

• **Radios and Timber**—Other Philco expansion moves:

• Construction of a large new Philadelphia plant for the production of radio and television sets, and for phonographs.

• Acquisition of timber land and a sawmill in South Carolina to supply badly needed wood for cabinets (BW—Jan. 15 '46, p75).

• Purchase of a Lansdale (Pa.) radio tube plant.

To integrate its business, Philco has also divested itself of one subsidiary. This spring it sold the Philco Storage Battery Division to Gould Storage Battery Corp. (a subsidiary of National Battery Corp.) for \$4-million. Reason: The division's industrial batteries did not mesh well with Philco's line of consumer products.

During the first half of this year Philco grossed just under \$108-million. Its net income for the period was \$4-million, as against a net loss of \$54-



Machines Work Better, Too with ENGINEERED AIR CONDITIONING

Air conditioning does a far bigger job than merely keeping people comfortable on hot days—though that job alone pays rich dividends to commercial establishments of all kinds in increased patronage, and to employers in greater output and higher work efficiency.

In addition to cooling, true air conditioning heats, humidifies, dehumidifies, filters, ventilates, and circulates air. By performing all of these functions, air conditioning does a year-round job, not only in increasing human comfort, but also in process applications—from drying automobile bodies in a paint tunnel to cooling oil for huge diesel engines. No matter whether the problem is simple or complex,

Trane Engineered Air Conditioning provides the smooth-functioning, trouble-free operation of products that are designed and built together for use together.

Trane heating systems and air conditioning systems—made possible by the complete line of Trane products—are designed for each application by architect, engineer, or contractor. 85 Trane field offices are ready to help them.

* * *

The Convector-radiator—modern successor to the old-fashioned cast iron radiator—has been engineered by Trane for universal application to steam and hot water heating systems, and is being produced in quantity so you can now secure it from local distributors' stocks.

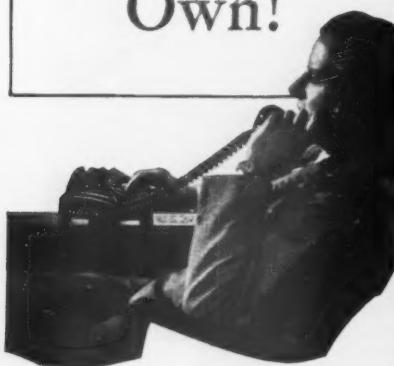
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Run your business from your desk—no need for you and your key personnel to chase each other all over the office or plant. A simple, economical installation of the Select-O-Phone System will establish instant inter-communication between five to thirty-six desks... keep the private exchange switchboard and rented telephones free for outside calls... reduce toll charges... cut delays.

A spin of the dial puts you in touch with any one on the system for a *strictly private* conversation or a round table conference. Any station may call any other station. Patented feature permits *unlimited simultaneous conversations*. The Select-O-Phone System is the easiest to install, maintain and expand... flexible, most economical, efficient, complete... built by Kellogg—for 50 years a leader in the development and manufacture of telephone equipment!



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TWO REBEL NOTES: Down with long skirts... off with upholstery

Will New Women's Styles Catch Hold?

Department stores felt themselves heading from the frying pan into the fire this month. August sales were falling below the post-OPA peaks registered in August, 1946, despite the stores' best efforts. And there was every evidence that the new fall silhouette displayed in women's fashions was going to be considerable of a gamble.

The big stores have been marking down and cleaning out clothing inventories—getting ready for fall and winter style shows and promotions that will stress the new silhouette. But the big question still stands: Will it go over? Will all the shows and promotions and other hoopla be able to sell dresses? Or will they be, in the jargon of Seventh Ave., a flopoo?

• **Resistance**—First faint reports are coming from around the country. Women in Dallas, Cleveland, and Berkeley, Calif., expressed their opposition to the new-style "padding," the lower hipline and hemline. Former G.I.'s are being brought into the controversy: A war veteran's remark, "as for styles, I still like legs," is weighed heavily by department store

controllers and treasurers who have to pay the bills.

Many retailers—and all the fashion experts—believe that most women will go for the fall and winter styles. The austerity in wartime fashions caused by rulings of the War Production Board has lasted two years beyond the war. Revolutionary change in style has psychological appeal for women who have dressed almost in uniform for nearly five years.

On the other hand, the conservatives point out that: (1) Department sales are showing over-all declines; (2) consumers aren't so free with cash; (3) charge accounts are growing; (4) bad-debt losses increasing. They say "maybe."

• **Higher Prices**—Everywhere it is conceded that women are going to pay more for their clothes this fall and winter. All the new clothing showings indicate that. So do retailers' contracts with cutters. The fall and winter fashions will use more fabric per garment, more decoration, expensive fur trimming—all of which add to the cost of draping the female form.

000 that was incurred during the first half of 1946.

• **Garod Bought Out**—The Garod deal is a horse of another color. Instead of acquiring, Garod has itself been taken over. The new owner: Leonard Ashbach, president of a Chicago appliance distributing firm, Leonard Ashbach Co. The price for all of Garod's stock "greatly exceeded" \$1-million.

Ashbach has several plans for his new purchase. For one, Garod is to get into production of a Garod refrigerator as soon as materials needed for making it have loosened up a bit. For another, Garod will push mass-production of low-cost radio receivers. To help push up sales of the 1948 line of receivers, Ashbach has also raised Garod's advertising ante.

Auto Slowdowns

Heat and steel shortages are two causes. Warehouse lack hampers steel stockpiling. One union fights "heat strikes."

Two factors have combined to keep recent auto output well below the 5-million-a-year rate reached earlier this year: (1) shutdowns due to heat, and (2) shutdowns due to steel shortages. "Heat Strikes"—In the last decade, "heat absenteeism" has become the "heat strike" in a number of mass-production industries. Worst hit by the "go home when it's hot" movement has been the auto industry. There, tactics developed by the C.I.O. for union pressure purposes have been taken over by "heat strike" instigators who want to make sure enough employees leave their jobs to avoid the disciplining of individual workers.

Last week, for the first time, officers of one union local got fed up with the summer walkouts, stepped in to lay down some law. Over the signature of its president, Local 154 of C.I.O.'s United Auto Workers posted a notice on bulletin boards at Hudson Motor Car Co.

• Hardship—It made the point that time lost by all the members because of walkouts in key departments was cutting deeply into family incomes. "The members will not tolerate minority groups or individuals taking unfair advantage by closing down key positions to the detriment of the majority membership," the notice said.

The communiqué brought no immediate reform. Next day another plant shutdown was necessitated by heat walkouts. But the company hoped that the interests of the majority which the union spoke for would soon assert themselves decisively.

• No Warehouse Space—One factor behind the recurrent steel-shortage shutdowns is the auto makers' lack of warehouse space. Before the war they didn't need it—the assurance of regular deliveries allowed them to proceed with a minimum working inventory. So storage capacity rarely exceeds a week's supply.

This year, with the steel squeeze on, there is no assurance of steady deliveries. Result: The companies never know more than a few days ahead whether they'll have enough steel.

• Shorter Week?—Why don't the auto companies work four-day weeks to stretch the supply? Chiefly because the unions object. They assert that such a schedule cuts hours and reduces income in such a way that unemployment benefits can't be claimed.

How a sacred lamp used *Asbestos* wick



In 438 B.C., a famous Greek sculptor fashioned a golden lamp to burn forever at the feet of Pallas Athene. Its durable wick was made of *Asbestos*.



The ancient Chinese sometimes wore sleeve ruffles which could be cleaned by bathing in fire. These ruffles were made of *Asbestos* cloth!



The first airmail bags for the U.S. Post Office Bureau of Equipment and Supplies (1919) were made of K & M Asbestos Cloth.



One rainy day in 1850, a lumberjack amazed his comrades by tossing his wet socks into the stove, removing them clean, dry and whole! The socks were made of *Asbestos*.

The asbestos wick for Athene's golden lamp is History's earliest mention of asbestos. From then on, right up to the middle of the 19th Century, asbestos textiles were largely curios—too costly for any but the rich.

Today, however, you need only look about you to find an example of how K & M Asbestos Textiles serve you. Your neighborhood theatre has an asbestos curtain to act as a fire barrier. Ever watch a big fire? Doubtless you saw rescue workers wearing asbestos suits and gloves. There's K & M Asbestos Yarn in brake linings and clutch facings, and in electrical insulations. K & M Asbestos Tape insulates on locomotives and railroad cars where clearances are too small for heavier insulations.

If your industry has a ticklish insulating or fire-proofing job, perhaps some K & M Asbestos Textile product could solve it. Why not turn the problem over to us—we'll attend to your inquiries promptly.

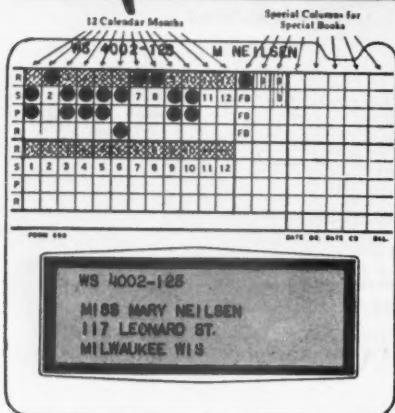
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Montgomery Ward use these cards as their only ledger card to show the date and amount of every shipment they make to a customer, and a record of all complaints received from each customer.

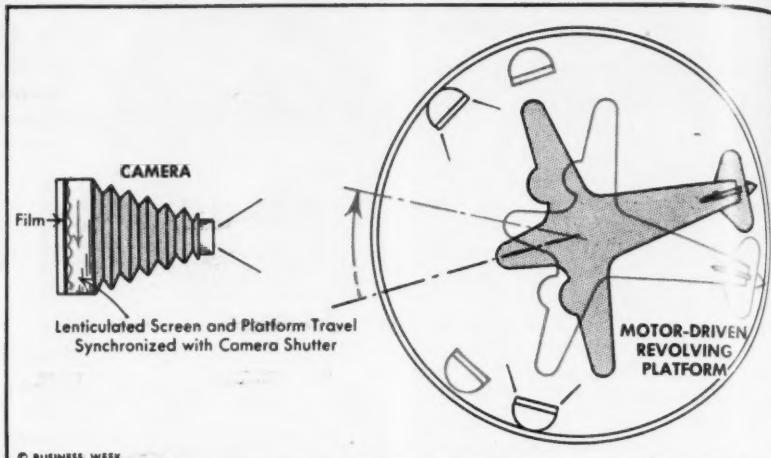
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AKRAVUE gives photographs depth with a rotating subject, ridged screen

Pictures in Three Dimensions

Akravue, the second method developed, is the first to be made available commercially. It uses standard camera, lens, and film, plus a die-pressed, Vinylite lenticulating screen.

Almost everybody can remember the sense of depth and arrested action that Grandma's stereoscope gave to photographs. Advertising men, publishers, portrait photographers fully recognize the profit potentials in adding a third dimension to photography. But such a process, to be commercially practical, must eliminate the need for special viewing equipment. No one expects a customer to view an advertising display or a picture layout through a stereoscope.

• **Answer**—So far as advertising displays and portraits are concerned, Bond Displays, Inc., of Philadelphia says it has an answer. Its answer is Akravue—a three-dimensional photography technique requiring a minimum of special equipment and using standard film, camera, and lens. It is now ready for commercial licensing.

Akravue isn't the first to announce a three-dimensional process. Douglas Winnek recently announced that his Trivision system (BW-Jun.21 '47, p20) is almost ready for commercial use. But Akravue is the first available.

• **Differences**—The principle of both Akravue and Trivision is fundamentally the same: Take a panorama picture and correct it with a lens system into a stereoscopic image. The way they do it makes the difference; it also makes for certain limitations in each process.

Trivision uses a special, extra-large lens (up to 10 in. in diameter) and a specially processed film. The film

is embossed on its base with a series of curved ridges, each tiny ridge forming a semicylindrical lens. In the trade, they call this lenticulation. The ridges "steer" the light rays, so the person viewing the film gets the effect of depth.

Akravue scorns special lenses and special film. Its inventor, Harold A. Backus, who heads up research and engineering for Bond, gets the panoramic effect by revolving the subject before the standard camera and lens (picture, above). He gets the "lenticular" effect by moving a ridged screen across the film as the picture is taken. Then the developed picture, when viewed through a similar screen, takes on remarkable depth.

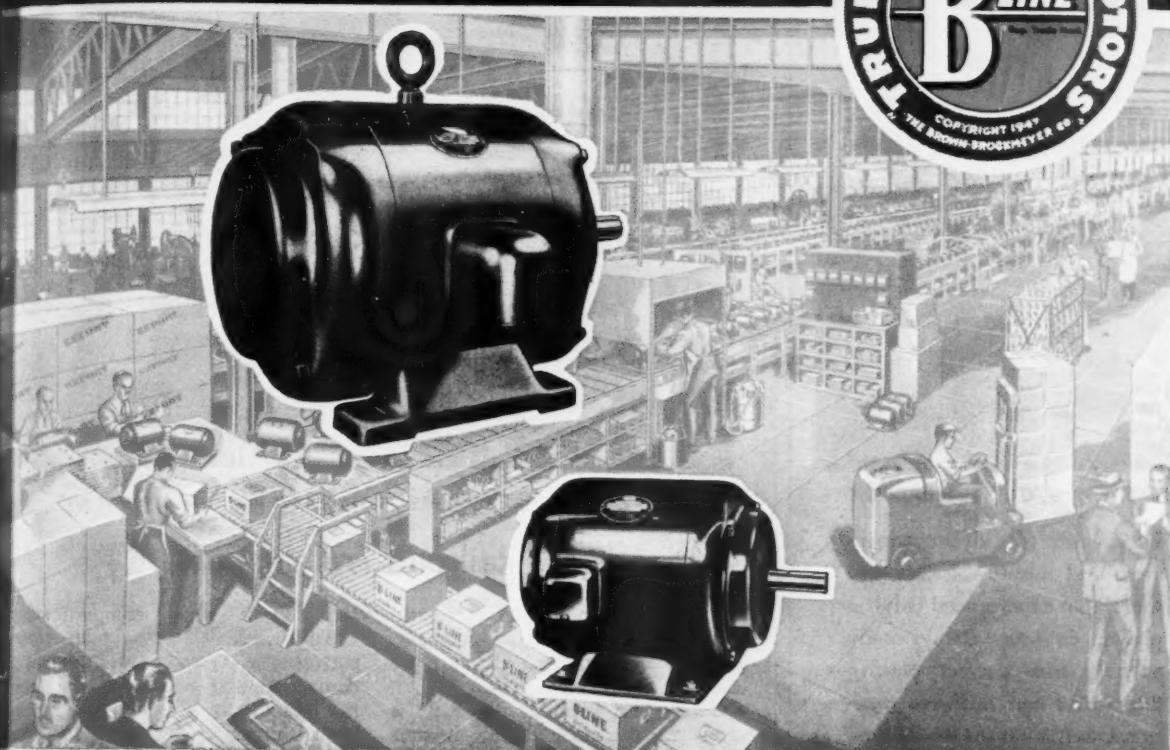
• **Technique Needed**—Backus' system requires careful coordination of the relationships between speed of subject rotation, speed of screen movement, shutter speed, amount of light, location of objects, and placement of camera. But, according to Jesse Hartman, who worked out the camera technique for Bond, once the technique is mastered it is easy to apply.

At the present stage of development, Akravue is limited to "stills" for advertising use or portraits, taken indoors. Trivision, although it does require a special lens, can be used for both outdoor and indoor photographs. (The Navy experimented with it for aerial photography.)

The screen used in Akravue work

MODERN METHODS, IN MODERN...
PLANTS, PRODUCE MODERN MOTORS

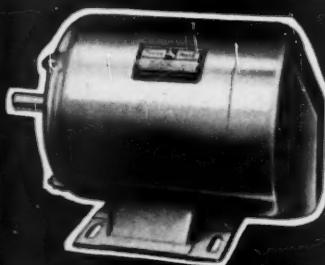
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B-LINE GEARMOTORS
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REPRESENTED IN PRINCIPAL CITIES



CAR-LOADING AID: partitions and shelves for bigger, safer boxcar loads

Bulkheads for Railroad Freight Cars

Take the principle of the barnyard gate, add a shelf arrangement, and you have the latest idea in more efficient freight handling.

• **Gates**—The Pennsylvania R.R. is using the principle in new boxcars under construction at Altoona, Pa. Steel gates, in upper and lower sections (picture), are fastened to the sides of the car about six feet apart. When the gates are closed, they lock together to form bulkheads across the car from the floor to near the ceiling.

Sectional steel and wood shelves are hinged to the top of each of the lower gates. When the gates are locked in position, the shelves swing up and rest on the top of adjacent gates, forming a second floor or deck. The net effect is to divide

the car into small compartments. Freight piled in the upper compartments rests on the shelves, can't damage freight on the floor. And the locked gates keep the floor load from shifting.

• **More Load**—Because merchandise freight is bulky but not heavy, boxcars are usually inefficiently loaded. The new device will permit use of waste space. One hundred of the new cars with the device will be built 60 ft. long—one-third longer than standard. This will allow double the average loading. Three hundred others will be 50 ft. long—ten ft. longer than standard.

When a car is unloaded, the gates can be swung to the sides and locked in position, if the car is to be used for general service.

is in effect a precision lens. It is made of Vinylite (a clear plastic) that is embossed with 80 lenticulations to the inch which are made by an accurately ground steel die under controlled conditions.

• **What About Printing?**—Both systems still have plenty of headaches ahead. The ultimate is to get the three-dimensional effect in printed pictures. Right now, Akravue Ektachromes, fitted with

a viewing screen, make practical advertising displays.

In printed three-dimensional pictures, however, the problem is how to get the lenticulated screen over the picture. And the problem is further complicated by the fact that the screen must be precisely located over the picture. That's easy in building a display box; it's another matter in a high-speed press run. Presumably a special



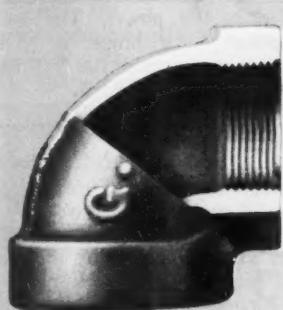
PHOTOMICROGRAPHS
check grain structure
of metal.



TENSILE TEST MACHINE
checks strength.

Quality Control of Pipe Fittings to assure safe, leakproof connections

- ★ Uniform Metal Structure free from wall leaks.
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- ★ Precision Threads for easy running-up and tight joints.



★ A simple pipe fitting, installed and forgotten. If it bears the well known Grinnell "G", you may be sure every precaution has been taken so that you may forget it.



"COMPARATOR"
checks threads.

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- Cooling Systems
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GRINNELL
FOUNDED 1850

WHENEVER PIPING IS INVOLVED



In Production, Too

"Controlled-Air" Power Produces Startling Results

MANY a production executive, after his first use of Bellows "Controlled-Air" Powered Devices, is as startled at the results as a young woman over a carnival air vent.

These small, compact air-powered units (air motors, air feeds, air vises) transform standard machines such as drill presses, milling machines, etc., into fast automatic units; make tool room construction of high speed special purpose machines both economical and practical.

For example, a Cincinnati foundry, casting the top and bottom plates of an aluminum waffle set in one piece, was cutting out the plates with an inverted lathe, fed by hand. Maximum production was running 15 per hour; tool breakage was high, fatigue a serious problem.

A Bellows "Controlled-Air" Power Feed, plus an air-operated fixture was installed on a vertical miller equipped with a special cutter head. Production jumped to 70 an hour, fatigue complaints were a thing of the past, and the saving in tools paid for the equipment in short order.

In your own plant you have many operations, now being done by hand, where the use of Bellows "Controlled-Air" Power Devices intelligently applied will produce equally startling results.

Bellows field engineers are located in more than forty cities in the U.S. and Canada. Why not have one of them discuss with your production executives the use of "Controlled-Air" Power? No cost—no obligation. A note on your letter-head will bring one promptly.

The Bellows Co.

AKRON, OHIO



NIGHT CHASER

Mounted on a half-ton Bantam trailer, this light tower is putting in a lot of road work. Arrow Supply Co., Pittsburgh, developed the portable unit for use in night construction work on Pennsylvania state highway projects. A generator in the trailer supplies the power. The tower operates on a hinge, is 18 ft. high when erected, has 9-ft. road clearance when folded.

lacquering and lenticulating unit could be used in the printing operation. Both Trivision and Akravac have such units under development; the latter hints that it will soon show printed three-dimensional pictures.

• **Problems**—However, before publishers and printers get too enthusiastic, they should know that both processes bring up additional technical problems. For example, what about conflict between the vertical lenticulation lines and the dots on the half-tone screen? And how about the problem of enlarging and reducing pictures in proper relationship to the original number of lenticulations?

PACKAGED FLUX

Packaging problems are not always confined to consumers' goods. For example, steelmakers like to use sodium fluoride as a flux in the production of automotive sheet steel. But steel workers refuse to work with unpackaged fluoride because the compound is highly toxic. It can cause dermatitis, blindness, or even bone disintegration. The problem has been to find a way that workers can put the flux into the

furnace without touching it directly. First idea of suppliers was to use cellophane bags (four ounces of the compound flux to two tons of steel). But these had to be filled by hand, they broke under rough handling, and the cellophane occasionally reacted with the fluoride.

Tin was ruled out as a packaging material because it was not available in desired quantity. Lead is not used because it can damage furnace linings.

So Associated Drug Industries, Inc., of Cleveland, through its Atlas Laboratories Division, is now using aluminum containers to package fluoride. The steel industry is trying them out. Aluminum, besides being satisfactory as a container, tends to increase flux efficiency, according to Associated Drug engineers.

Filling of the containers is done on automatic machines, using supplementary air pressure. Operators are protected with dust respirators, but a special ventilating system is soon to be installed in the Akron (Ohio) plant.

ANTIKNOCK COMPETITION

Tetraethyl-lead antiknock compound for motor and aviation fuels will be marketed by E. I. du Pont de Nemours through five new district offices beginning next Jan. 1. A complete petroleum-chemicals lab will be set up in each district.

Du Pont's new contract with Ethyl Corp. expires at the end of 1947 (BW—Oct. 12 '46, p19); the du Pont antiknock compound will be directly competitive with Ethyl's.

District headquarters will be at Tulsa, Houston, Los Angeles, Chicago, and Wilmington, Del. Antiknock compounds will be sold direct to the oil refining industry through du Pont's expanding petroleum chemicals division.

MACHINE BRAIN FOR U.C.L.A.

Staff researchers at the University of California at Los Angeles can look forward to easier going in mathematical problems. The university has received the first commercial model of General Electric's war-developed differential analyzer (BW—Jan. 6 '45, p54). This mechanical brain will serve up the solution to differential equations requiring as many as 14 simultaneous integrations.

The analyzer, which takes up most of a large room, operates mechanically but is electrically controlled. Engineers set up their equations in the machine, get a plotted curve that gives a graphic representation of the solution. U.C.L.A. won't monopolize the machine, plans to make it available to West Coast utilities and other industries.

first to develop a corrugated PREPAK*



*REG. U. S.
PAT. OFF.

Hinde & Dauch cooperated with one of the country's leading department stores in developing the original PREPAK*, a method used to factory pack products in selling units for delivery direct to consumer without repacking by the retailer. This more efficient, more economical packaging method saves damage in transit, eliminates mark-downs. PREPAK* . . . an attractive package that invites more sales and "take-withs" . . . enables the retailer to sell from display and ship from warehouse. Each H & D "first" . . . the DUPLEX shipping-display box, the duo-use LUGGAGE Box and many others . . . provides better protection, more advantages in shipping, greater economy in distribution. The Hinde & Dauch Paper Co., 4709 Decatur St., Sandusky, Ohio.

LOOK TO

REG. U. S. PAT. OFF.



FOR PACKAGING

"firsts"

HINDE & DAUCH Authority on Packaging

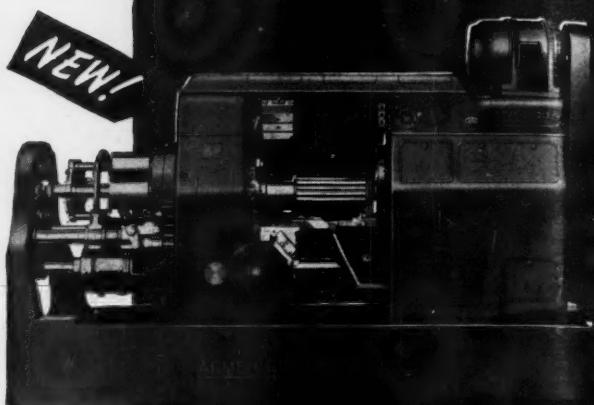
FACTORIES IN: Baltimore 13, Maryland • Buffalo 6, N. Y. • Chicago 32, Illinois • Cleveland 2, Ohio • Detroit 27, Michigan • Gloucester, N. J. • Hoboken, N. J. • Kansas City 19, Kansas • Lenoir, N. C. • Montreal, Quebec • Richmond 12, Virginia • St. Louis 15, Missouri • Sandusky, Ohio • Toronto, Ontario • Boston, Mass.

See these

National Acme

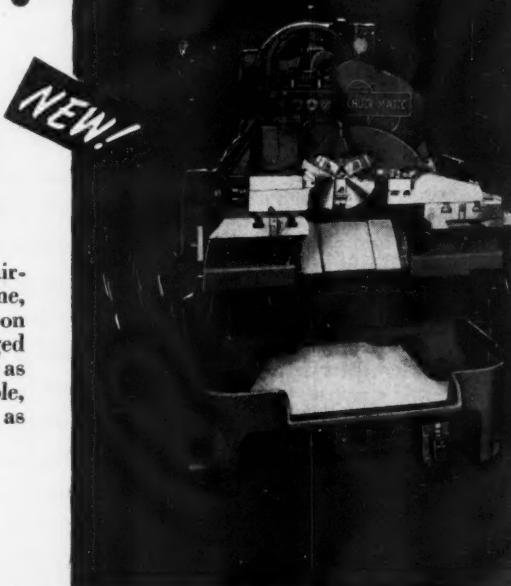
FOR LOWER COSTS ON AUTOMATIC BAR WORK

The new $1\frac{1}{4}$ " Model RB Acme-Gridley Six-Spindle Bar Machine offers three basic time and moneysaving advantages: It's heavier, more powerful—for today's increased speeds and feeds. It's more versatile—will handle more operations (including many second operations)—at a lower machine investment, with less handling, lower machining costs. And it's easier to operate—to give maximum man-hour output, compensating for increases in other costs.



FOR INCREASED PRODUCTION ON CHUCKING OPERATIONS

The new Acme-Gridley 12" Chuck-Matic is an air-operated, single-spindle, automatic chucking machine, especially suited for heavy-duty, high production on castings, forgings and tubing parts. It's built rugged—and powerful—to operate at speeds and feeds as fast as carbide-tipped tools can take it. It's simple, compact, easy to operate—one man can run as many as four machines.



NATIONAL ACME AT THE MACHINE TOOL SHOW
ALSO WILL DEMONSTRATE 4, 6, AND 8 SPINDLE BAR AND
CHUCKING AUTOMATICS AND OTHER STANDARD PRODUCTS

Production Profit-Builders at the Show

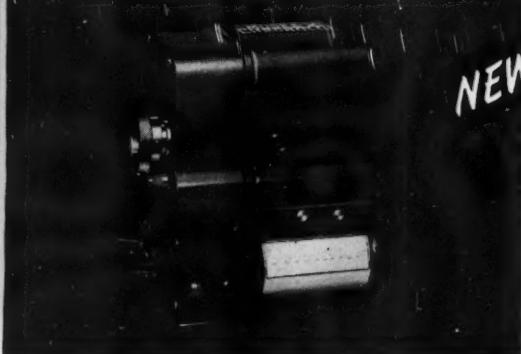
NEW!



NEW!



NEW!



FOR HIGH-SPEED PRECISION THREAD AND FORM ROLLING

The new Namco Roll-Matic is a triple-roll hydraulic thread and form rolling machine, built to cut your costs on all standard pitch threads in sizes from $\frac{3}{8}''$ to $1\frac{1}{2}''$. Operation is simple, dependable—and versatile. The three rolls, backed up by powerful, straight-line camming, give positive, equal pressure—resulting in smooth threads, close fit (class 3 fits are easily attainable) and no distortion, even on hollow work.

FOR MORE ECONOMICAL THREAD-CUTTING PRODUCTION

The new adjustable-blade chasers bring even greater versatility to standard Nameco self-opening Vers-O-Tool die heads. These new chasers are especially suited for shorter runs, where they minimize tool investment. Adjustable chasers cover the range of the six standard Vers-O-Tool heads for capacities from $\frac{3}{8}''$ to $1\frac{1}{8}''$, and are interchangeable with circular chasers, size for size. Positive adjustment for bringing the cutting edge up to proper position after each regrind—and more grinds per chaser—are outstanding advantages.

10% MORE PRODUCTION ON ANY MACHINE

The Chronolog is National Acme's automatic, electric means of providing accurate, indisputable information on machine performance. Approved by management and labor alike, it gives a complete production record, telling why, when and for how long any operation was down during the shift. Without exception, users report a minimum of 10% increase in production after installing the Chronolog.

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MACHINE TOOL SHOW
CHICAGO—SEPT. 17-26

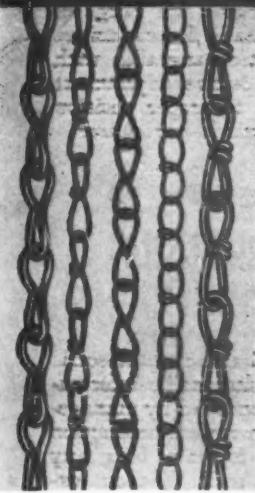
...keeps his distance

on a HERCULES*
PICKET CHAIN



made of

KEYSTONE WIRE



While most chains are not stronger than the weakest link, Hercules chains are not weaker than the strongest bull. Just let any onery, frisky critter get on the end of a well-anchored Hercules picket chain made of 8-gauge Keystone wire, and you know he'll stay put.

Or, if you need lighter chain for your dog, porch swing, hammock, well pump, boat tie or any other use, you can look to Hercules for the exact type of chain you need. A complete line is offered — all made of quality Keystone wire.

A long list of industrial firms are using Keystone wire in their products. Whatever your wire needs, Keystone can normally supply them.

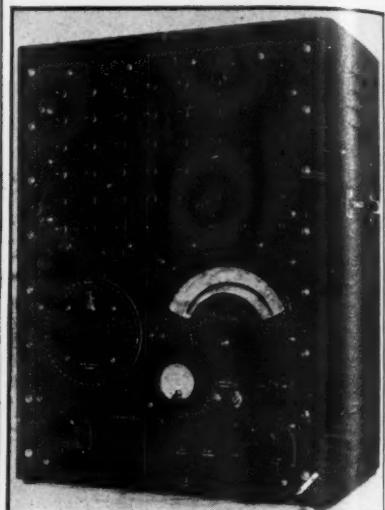


*Cincinnati Pump & Mfg. Co.,
Cincinnati, Ohio

SPECIAL ANALYSIS WIRE
for all industrial purposes

KEYSTONE STEEL & WIRE COMPANY
PEORIA 7, ILLINOIS

NEW PRODUCTS



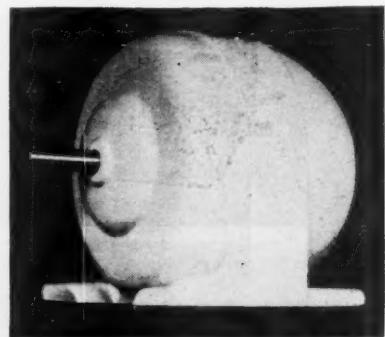
Strain Reader

Electrical strain gages (which utilize change in wire resistance to indicate amount of static strain) are now widely accepted in industry (BW-Jun.29'46, p56). Nosker Engineering Products, Yellow Springs, Ohio, has a portable device which simplifies the problem of reading the gages.

Called the Model 2A Strain Indicator, the electronic instrument can measure strain, selectively, from as many as 48 wire-strip strain gages, in any desired sequence. Strain is read immediately, without delay for electrical balancing, on an illuminated meter. Readings to the left of center indicate compression at the point of test; those to the right indicate tension.

The instrument operates on 105-125 v., 60-cycle a.c. current. It is housed in a metal cabinet, weighs approximately 125 lb.

Availability: immediate in small quantities.



Lightweight Motor

Simple design and aluminum alloy construction are combined to reduce over-all weight in a new line of frac-

TS
tional horsepower electric motors marketed by Electra-Motors, Inc., 1110 N. Lemon St., Anaheim, Calif.

The motors are designed for continuous duty, operate at 60 cycles, 220/440 v. The load-bearing frame is one-piece; motor base has slotted holes for belt adjustment. Double-sealed bearings are said to be lubricated for life.

Availability: deliveries in one to four weeks.

Coolant Warmer

Engine freeze-ups on outdoor jobs reportedly can be prevented with a coolant heater for construction machinery, developed by Anchor Post Products, Inc., Baltimore 24. The heater functions independently of vehicle operation, is said to maintain safe temperature levels over long periods of idleness. It has an output of 77,000 B.t.u., consumes approximately $\frac{1}{4}$ gal. of fuel per hour. The heater is manufactured in 12-v. or 24-v. models, burns gasoline or diesel fuel.

Availability: end of September.



Foldaway-Lift Truck

Mixermobile Manufacturers, Portland 16, Ore., say they have an answer to the problems of low clearance and tight-quarter operation of lift trucks. Their solution is the Wagnermobile Lift, whose main feature is a hydraulic lift that can collapse completely into the truck body when not in use. Resembling the extension bellows of a camera, the lift will handle 6,000 lb. up to eight ft., or 4,000 lb. up to eleven ft.

The truck weighs 7,425 lb. with fork and boom. It can be operated inside freight cars or narrow factory aisles. Power-steer, lift, and tilt are all hydraulically controlled. The lift body's sloping front allows the operator to see ahead and watch the load.

A variety of quick-change attach-



Exporter loses \$thousands trying to save \$hundreds!

The cost-conscious export manager figured on saving a few hundred dollars by having an overseas order crated at his plant. Unsound arithmetic... for he failed to consider that his shipping department lacked facilities and savvy for export packaging.

Because of inadequate packaging, two of the first ten units were found damaged on arrival in Chile. Result: the inconvenienced consignee cancelled the rest of the order... transferred \$100,000 in annual business to one of the exporter's competitors.

This incident illustrates the experience of hundreds of U. S. manufacturers and export agents who have lost millions of dollars in good will and sales by taking chances on so-so packaging.

Safeguard your position in foreign markets by turning your export processing and packaging over to Dade Brothers.

Regardless of the size, shape, weight, construction or quantity of your product... Dade engineered packaging will provide maximum protection against breakage, pilferage, corrosion and other hazards of trans-ocean shipment.

Commodities for export may be forwarded to Dade seaboard plants on a through rail rate to shipside. Comprehensive service includes seaboard storage of export goods awaiting packaging and shipment... issuance of warehouse receipts which are acceptable collateral for bank loans... cooperation with agents, forwarders.

Let Dade relieve you of your export packaging headaches... save you plant space, time, costs. Write today for full details.



DADE BROTHERS, INC.

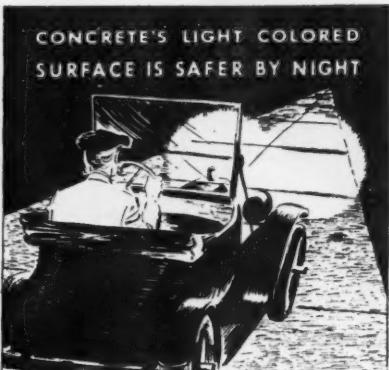
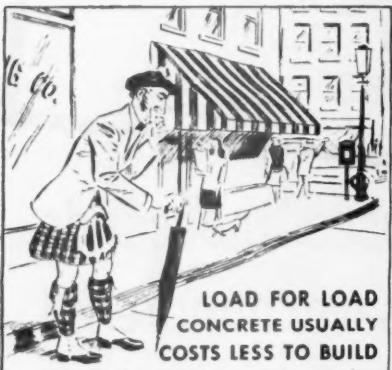
Packaging for Export

Sales Offices: PORT NEWARK, N. J. • CLEVELAND • DETROIT • CHICAGO • NEW ORLEANS
OAKLAND, CAL. • Seaboard Plants: PORT NEWARK • NEW ORLEANS • OAKLAND



SANDY McWARELONG SAYS:

Here's why I want
CONCRETE PAVING
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Ask YOUR officials to spend YOUR dollars
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ments can be adapted to the basic truck. The manufacturer also offers an enclosed cab, supplied as extra equipment.

Availability: 15 days.

Three Home Helps

There's still room for improvements around the house.

Tidy Shelf helps straighten up the medicine chest, keeps articles for daily use out in front and handy. The device hangs on any cabinet shelf, has four small shelves that each give extra space for one or more toilet items. The metal shelves are finished in ivory enamel. Northmore's Home Products, P. O. Box 756, Highland Park, Ill., is the manufacturer.

Hamilton Mfg. Corp., Columbus, Ind., makes the Cosco tubular-steel step ladder. It has a broad-angle, legless base designed to prevent slipping or wobbling, extra-wide steps, a brace that locks automatically in open or closed position. A collapsible work-tray placed at the top of the ladder is flanged on all sides. The ladder is finished in aluminum paint with enameled steps and work-tray.

Stor-A-Way, a steel bracket, hangs storm windows and screens for storage, prevents warping and glass breakage. The device is screwed on a ceiling beam, has curved hooks on which screens or windows are suspended by their frames. Hanging can be in either vertical or horizontal positions. The brackets are boxed in a set of four, enough to hold 21 windows or screens. Barber Mfg. Co., 5710 Nicollet Ave., Minneapolis 9, is the maker.

Availability: immediate delivery for the shelf; two weeks' delivery for the ladder and rack.

Photographic Memory Meter

To simplify the job of taking pictures, General Electric Co., Schenectady, N. Y., has developed the new Type PR-1 photographic exposure meter. It incorporates unique "memory" features: a pointer-locking mechanism which "remembers" the amount of light seen by the photocell; a special dial which "remembers" to shift the meter automatically from high light to low light as the scene requires; and a trident analyzer which "reminds" the photographer to check the range of light on the subject.

The meter is operated simply: Press a button, set the trident in line with the pointer, and then read the proper exposure.

Other claims: a complete range of combinations of f-stops and shutter speeds; dial construction which allows shift of the meter to movie use. The meter is light weight, and accuracy is sufficient for color work. It is housed in a molded plastic case.

Availability: Oct. 1.



BUSINESS WEEK REPORTS TO EXECUTIVES ON —

THE NEW AMERICAN MARKET

All over America, business and marketing operations were profoundly affected by World War II.

In the fifth of a series of regional reports on the New American Market, Business Week turns its attention to New England. The war and postwar changes are fully outlined to show how the region fared. Enough statistics are included to illustrate and fortify the economic story. However, a great mass of statistics had to be omitted; they will be found in a three-page supplement furnished with reprints of the report.

Next month: the Farm West.

NO. 5 NEW ENGLAND



No major region of the U.S. stood still or slipped downhill during the war and postwar years. Everywhere the trend was up.

So New England, the oldest region of the nation, shared in the general economic improvement. There was

no doubt in the minds of New Englanders that business was better. There was more money being made and more money being spent.

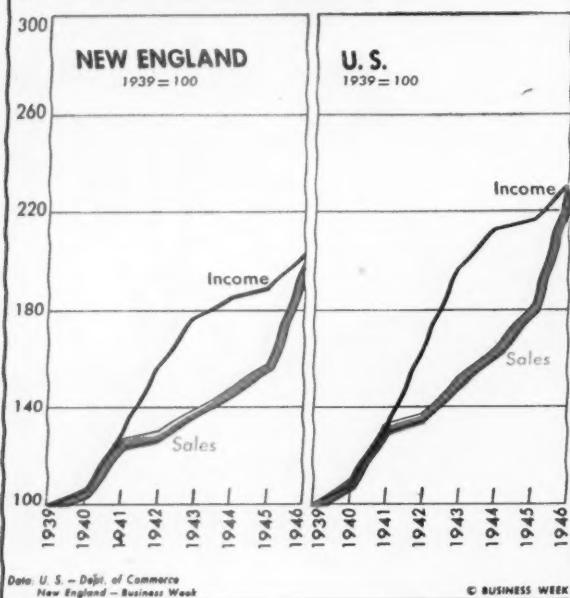
That's what you see when you look at New England through rose colored glasses. Now put on a pair of darker lens spectacles. And what do you see?

A region losing the race to its rivals. Sure, it is moving ahead still. But, on a relative basis, the New England advance is not so handsome. Sensational growth of other regions, particularly the West and South, make the New England showing less impressive than it otherwise would.

That prosperity had returned to New England on the wings of war was easy to see. As early as 1940, a night train trip on the New Haven from New York to Boston gave you a panoramic view of better times. You saw the lights burning in machine shops and factories working round the clock—plants that oftentimes in the past had been unlighted and idle at night and whose owners were lucky to run their full shift in the daytime.

Through the plant windows you could see workers busy at machines—and as the war progressed you could discern a growing number of women among them. It was

NEW ENGLAND SALES BELOW U.S. How trade caught up with income



the sign that male unemployment had disappeared and that the region's labor force had new recruits.

Industrial New England was in the war up to its ears. Although not many spanking new war plants were built here, the idle old ones were being drafted into service and the old ones already running were turning out more goods.

The war and postwar gains in manufacturing—good as they were—served mainly to offset losses of the two preceding decades. Ever since World War I the region had been losing ground on a comparative basis. In fact, the losses in manufacturing had been so large as to show an absolute as well as a relative decline. So, there was a big deficiency to overcome in order to restore New England to its pre-1920 position in this field.

Naturally you would expect New England to go up less than the U. S. in a boom. In the first place, property income, which is the highest here of all regions, does not fluctuate so much as other types of income. Second, its industry has always been primarily in soft goods which go up less than hard goods in prosperous times.

Since New England's two main income sources are industry and property, the region's ability to boost its income was consequently limited.

Unlike most other regions, New England derives little income from agriculture. Therefore, it got little or no benefit from the sensational rise in farm income.

Further its government income rise was smaller by comparison. The South and the West got the lion's share with training camps and bases as well as new war plants.

Looking at the region from a time standpoint, New England was in a favorable position in the early war and early postwar era.

- At the advent of war, it was ready to take on war production work in its plants immediately. Its textile looms

were quickly switched to turning out military grades of cloth. Its machine-tool plants stood ready to re-equip metalworking plants to make tanks instead of autos.

- Similarly, no time was lost in capitalizing on the return of peace. As soon as the shooting stopped, the soft goods producers of New England began turning out civilian supplies again at a merry clip. But heavy goods makers, mostly in other regions, took a long time to reconver.

- Time began to work against the region, however, as the postwar era lengthened. When pentup demands for shirts and shorts and shoes were fairly well met, the soft goods boom lost steam in a hurry.

But before going into detail on these changing trends and what the future may hold, a historical look at the region is in order to secure a balanced judgment.

HISTORY AND MAKEUP

New England is the nation's oldest region.

As the oldest, it has rolled up the most history-economic as well as social and political. It is the best example in the U. S. of the typical pattern of economic growth in a region.

- In the early stages of settlement and development, the so-called "primary" or "extractive" industries—farming, forestry, and fishing—are in the lead.
- These give way to the "secondary" industries—manufacturing, mining, and construction—as a region passes from a rudimentary way of life.
- In the final stages, as the region becomes quite mature, there is a shift in emphasis to "tertiary" lines—distribution and service.

A breakdown of New England's changing labor force over a 30-year period clearly shows that the region's progress through these three stages has always outpaced the nation. Here is how New England compares with the U. S. in the 1910-1940 years:

Percentage Distribution of Gainfully Occupied Persons

	New England	United States	1910	1940	1910	1940
Primary industries	11	6	36	21		
Secondary industries	49	41	28	28		
Tertiary industries	40	53	36	51		
Total	100	100	100	100		

The entire U. S. had traveled a long way toward industrial maturity by 1940. Only one out of five persons were engaged in the primary industries by that time (as compared with one in three in 1910). But New England in 1940 was down to 6% in those lines. The region had fewer workers percentagewise in the secondary industries in 1940 while the nation had stayed constant. Both the region and the nation had expanded considerably in the tertiary lines but New England still had a larger share in 1940.

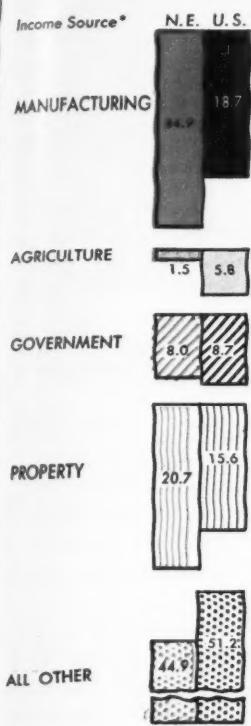
Going way, way back to Colonial days, New England had the most population, the most commerce, the most industry. Boston was the most flourishing city in the colonies before the Revolutionary War.

New England built the first factories to supply the

NEW ENGLAND INCOME LAGS BEHIND U. S. INCOME

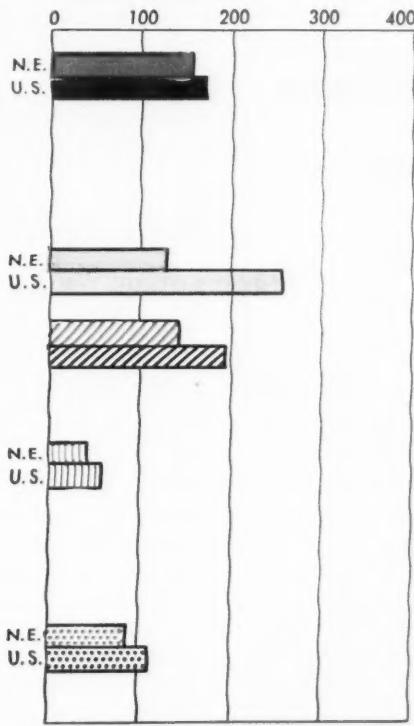
New England draws more income both from industry and property...

(Type of income as percent of total, 1939)



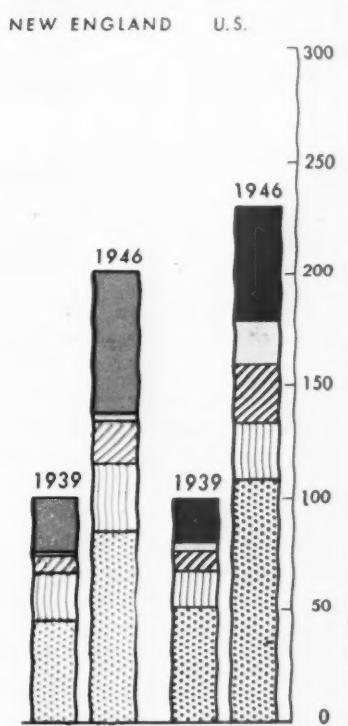
All types of its income gained less than the U. S. . .

(Percent gains, 1939 to 1946, by type of income)



So its total income advanced much less, too.

(1939 total income equals 100)



Data: 1939—Dept. of Commerce
1946—Business Week

*Manufacturing: payrolls only; Government: civilian and military pay plus allotments;
Agriculture: farm proprietors; Property: rents, dividends and interest; All Other: income from trades, services, utilities etc.

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manufacturing wants of the new nation. Water was the source of power so the mills were located on the region's many streams. The cotton goods industry sank its roots in the river-falls towns.

By the time mill sites on the rivers were at a premium, steam power came along. This caused more mills to spring up, usually at tidewater so coal could be brought in cheaply.

Arrival of hydroelectric power again caused more new mills to be built in locations farther from the water sources.

New England manufacturing spread from cotton into wool goods, leather products, and metals. The region capitalized on its timber resource by going into lumber and furniture making.

But by the latter half of the nineteenth century, the premier position of New England as a cotton goods producing area began to be assailed. In the South, competition built up rapidly on cheaper labor and nearer sources of supply. New England lost ground steadily in this field.

Even before that, the Middle Atlantic region had forged to the front in manufacturing. Failure to get an iron and steel industry in New England gave the Middle Atlantic the edge. (Boston lost its crown to New York

as the leading metropolis.) Thus began the slow, relative decline of New England.

Age, of course, is no barrier to growth. And New England kept on growing in various ways.

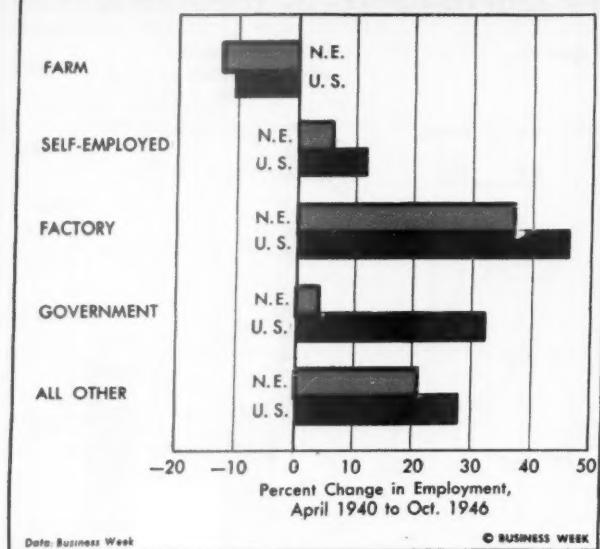
Its population, as ticked off by a half dozen decennial censuses, went from 4.7-million in 1890 to 5.6-million in 1900; 6.6-million in 1910; 7.4-million in 1920; 8.2-million in 1930; and 8.4-million in 1940.

But even while growing, New England was losing its hold on a big percentage of the nation's population, income, and industry. From the period since the turn of the century to the outbreak of World War II, New England's factory workers hardly grew at all. From 1919 to the outbreak of World War II, in fact, the number declined by more than a quarter. At the same time, the region as a whole was dividing itself into three distinct economic units.

Draw a line just above the southern boundaries of Vermont and New Hampshire and continue it across Maine to Portland. Everything above that line comprises an area that makes its way by farming, timbering, and recreation. And the greatest of these today is recreation.

This is one of America's most active playgrounds. It has the advantage of being nearer to the heaviest centers

NEW ENGLAND JOBS TRAIL U. S.



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of population, such as New York and Boston, than other resort sections. It offers swimming, fishing, and boating in the summer; skiing, and other winter sports in cold weather.

A guess at the size of this business—as good an estimate as any—put the annual volume in 1946 at one-half to three-quarters of a billion dollars. Because of the importance of the business and the lack of specific information, the Federal Reserve Bank of Boston developed this year a New England vacation business index—first in the nation.

As part of a regionwide study of the recreation business, a property survey was made in New Hampshire which revealed that 8.4% of all property in the state was for recreational use—summer residences or commercial places. To facilitate travel into the regions, a plan has been developed and construction actually started on an express highway from New York City to Bar Harbor, Maine (an extension of the Hutchinson River Parkway in New York and Merritt Parkway in Connecticut).

Industrial New England

Below the imaginary line drawn across the map is the section generally called industrial New England. However, that can and should be further broken into two parts. For gradually industrial New England divided itself into two main areas.

In the eastern part—from Manchester on the north to Providence-Fall River-New Bedford on the south, soft goods lines—shoes, textiles, etc.—predominate.

In the western part—from Springfield down to New Haven-Bridgeport-Waterbury, heavy goods are most important.

Soft goods industries are oldest in the region; they still account for more than half of all factory jobs (54% in 1946 vs. 49% for the U.S.).

Most indicative of the character of the region are the kinds of employment followed there. In contrast to the

nation as a whole, the New England occupational breakdown is as follows (employment groups as percent of total employment):

Group	New England	U.S.
Professional	8	7
Nonfarm proprietors	8	9
Clerks, etc.	20	18
Skilled workers	14	11
Semiskilled workers	32	20
Unskilled workers	16	24
Farm proprietors	2	11

Note that New England has a higher than average proportion of semiskilled and skilled laborers (suitable for factory work) and white-collar workers.

WAR AND POSTWAR

World War II proved to be a tonic that did a lot for New England's business health.

Losses in manufacturing and manufacturing employment which the region had been long sustaining were largely wiped out.

Idle industrial facilities lost their "white elephant" tags. One after another boarded-up factories were reopened. When the war began, about 6-million sq. ft. of factory floor space were available. This was whittled down steadily until only about 300,000 sq. ft. were idle this year. This was in small, scattered sizes, so a large operation could not use it.

Factory jobs started to climb almost as soon as the war came along. Since 1939 total jobs were up over 40% by 1945 when the wartime peak was reached. Shipbuilding brought fat war contracts and manpower problems to Portland, Bath, Boston, New London, Providence, and Portsmouth. Ordnance contracts were heaviest in the Springfield and New Haven areas.

Meanwhile, another striking change was taking place. For New England, traditionally a soft goods producing region, was growing faster on the hard goods side. While nondurable jobs went up 13% from 1939 to 1946, jobs in durable lines pushed up 84%. As a result, nondurable goods making, which provided two-thirds of all factory jobs in 1939, furnished employment in 1946 for only a little more than half of factory workers.

New Englanders like to stress that they're expanding in heavy industry lines while losing on soft goods. For, they say, we now have over 700,000 workers in durable industries, as against less than 400,000 before the war. A good supply of skilled labor is pointed out as an asset for such expansion.

Not noticed though is that other regions were going up in durable lines at the same time. From 1939 to 1946, New England's share of U.S. total durable jobs went from 9.4% to 9.6%. By pushing very hard in the metal-working field, the region has held its own despite great advances elsewhere.

But New England suffered a more serious relative loss in the soft goods categories. The region's share of the U.S. total number of nondurable factory jobs fell from 13.6% in 1939 to 11.8% in 1946. While leather,

paper, and other lines were definitely on the downside, textile mill products (though not apparel) surprisingly did better in the region than elsewhere. A jump from 18.8% of the U. S. total to 23.3% over the war years probably was due to two things: (1) Woolens predominate in New England and its swings up or down are always greater than those for cotton; and (2) more rayon business came into the region.

Since it's hanging on to metals and dropping some soft lines, New England is really shifting to higher-pay heavy goods. Also, within soft goods, it loses low-pay shoes and cottons but keeps higher-pay woolens and jewelry. So, within the region, there is a shift to "richer" industries.

New England is banking a lot too on two newer and fast moving industries—plastics and electronics. Big plants are already established in these fields—Monsanto at Springfield and G.E. at Pittsfield making plastics, Raytheon and General Radio in electronics in the Boston area. Small companies are numerous, particularly in plastics. The Leominster area is described by one New Englander as practically crawling with plastics plants.

The statistical picture of the manufacturing employment changes follows (percent of U. S. jobs in New England):

Industry	1939	1946	Change
Total	11.8	10.7	-1.1
Metals, etc.	10.9	10.7	-0.2
Machinery incl. elec.	14.8	14.4	-0.4
Furniture	11.7	8.4	-3.3
Textile mill products	18.8	23.3	+4.5
Apparel & leather	15.3	12.7	-2.6
Paper & printing	11.5	10.7	-0.8
Chemicals-oil-rubber	8.2	7.1	-1.1
Miscellaneous mfg.	17.3	15.2	-2.1

Regional observers point out that the declining importance of New England industry is partly a consequence of its relative maturity. Thus, manufacturing may be expected to yield fewer jobs in the late stages of industrial development. And at this point, the tertiary lines—creation, travel, trades, etc.—assume more significance.

Most important, from a marketing standpoint, however, are the high living standards that usually accompany "mature" economies such as that of New England. The region's per capita income, for instance, has always moved in higher levels than the rest of the country; in 1946 it stood at \$1,272 versus the U. S. figure of \$1,162.

However, it should not be overlooked that, in terms of income behavior, New England is the region of lowest income. From 1939 through 1946, New England total income rose 101% vs. 130% for the U. S.

Measured on a share of total basis, the record is the same. The region's share of U. S. income was 8.1% in 1939 and 7.1% in 1946, a rather drastic drop. Going back a little farther, the regional share was 8.2% in 1929 and moved up to 9.2% in 1933—this shows that New England income makes a better relative showing in poor times. As the national economy improved from 1933 to 1939, New England's share again fell off.

Curiously enough, population in New England kept

NEW ENGLAND'S OWN FORECAST

A representative group of New England business executives was asked by *Business Week* to express opinions on the region's future. Here is what we were told:

Asked of:	Question:	% Yes	Question:	% Yes
1. All	Do you feel New England business will be better in 1950 than in 1946?	50	In 1950 than in 1946?	44
2. All	Do you think New England will outdo the U. S. in 1947 compared with 1946?	39	In 1950 than in 1946?	52
3. General*	Do you think wartime growth of metalworking industry more than offsets soft goods decline so that region will maintain its industrial importance?	77		
4. Manufacturers		63		
5. General*	Do you think new industries will be attracted to New England because of its skilled labor supply?	69		
6. Manufacturers		54		
7. General*	Do you expect that New England can or will re-establish itself as a factor in foreign trade?	70		

*Includes Banks, Advertising Agencies, Newspapers, Public Utilities, Railroads

Less than half of New England business men expect 1947 business activity in their region to surpass that of 1946. Barely a quarter of them think New England will be better off than other parts of the country.

When it comes to taking a longer look, their opinion doesn't seem to change very much. At this distance, 1950 looks no more dreary or more exciting than the current year of business operation.

Considerable reliance obviously is being placed on the growing importance of the metalworking industry to aid New England in the industrial race. At the same time, there is a strong belief by non-manufacturers that New England's skilled labor will draw new industries; manufacturers are not so positive about this.

Foreign trade is looked upon by the majority as a field for future growth.

Data: *Business Week*.

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pace with the U. S. with a 7% rise for both the region and nation since 1939. Aside from Connecticut, however, which experienced an exceptional population influx of 15%, the rest of New England lagged behind the U. S.

New Englanders admit that income payments have risen more percentagewise since prewar in the nation than in their region. But they point out that the dollar increase in per capita income in New England was nearly the same (about \$600) as the increase in national per capita income. They add that regional per capita income has consistently exceeded the national average.

PROSPECTS

Business activity made its postwar high mark in March 1947. The soft goods slump which began right after that started to pull down over-all business volume in the region. Even so, the level of all activity was still above 1946 in the 1947 spring months. Offsetting the lower

Where Yankee Dollars Go

New England market patterns differ slightly but not radically from the nation's.

Income per person now averages a tenth higher than for the U. S. A trifle more of it goes for federal taxes—and savings—than nationally. What's left is spent in retail channels this way, in contrast with the U. S. (1939 sales breakdown as percentage of the total):

	U.S.	N.E.	Diff.
Food	24.2%	28.2%	+4.0
Eating & drinking	8.4	8.0	-0.4
Gen. merchandise	13.5	11.7	-1.8
Apparel	7.8	8.3	+0.5
Drug stores	3.7	3.6	-0.1
Filling stations	6.7	5.6	-1.1
Automotive	13.2	11.5	-1.7
Bldg. mat. & home furn.	10.6	9.1	-1.5
Other (fuel, etc.)	11.9	14.0	+2.1

Fewer dollars here go for new homes or new cars or into general stores. More is spent on clothes, and much more on food. Gasoline is a smaller expenditure item. But home fuel is a larger one than in the U. S. All this simply reflects the facts of climate, geography, and similar factors.

Chains did 24.1% of all retail business in 1939 versus 21.7% for the U. S.

New Englanders are older than other Americans on the average—12.7% of the population being over 60 vs. 11% in the U. S. And little more than a fourth of the population is under 18 years as against almost one-third for the nation.

output of nondurables are increases in such lines as electrical machinery, the paper industry, and services.

Where does New England go from here?

That will depend on two things: (1) general business conditions in the entire nation; and (2) Yankee ingenuity to keep abreast of, if not run ahead of, the national trend. Ever since the days when wooden nutmegs were sold, Yankee inventiveness has been an asset good enough sometimes for a loan at the bank.

If business is booming everywhere, New England will share in the prosperity. If a business bust occurs, New England will take a beating. But not to the same degree as other parts of the country in either instance.

Greater emphasis on production of nondurables provides a larger degree of employment stability. People continue to buy shoes and clothing and food when their purses won't permit them any longer to purchase autos and refrigerators. So, the more stable demand automatically provides more stable employment.

On the other hand, New England is not as well insulated as it was prewar to a decline in durable goods manufacture. The reason, of course, is that there has been more postwar expansion in hard goods lines.

The current farm prosperity of the nation is not shared

to any appreciable extent by New England. For less than 2% of the region's income comes from farming. Accordingly, should agriculture go into a decline, New England will suffer less than other regions.

Business leaders in New England do not believe that their goose is cooked by any means. They can talk confidently about the future as inhabitants of other areas and they bulwark their arguments by pointing to the great advances already made.

Simply because the region is old does not mean that leaders are old. New England has its share of plucky, aggressive young men who can set their sights as high as the next one. (However, the median age is higher in New England than in the U. S.—31 years versus 29).

There is no agreement on any one thing that will strengthen New England's economic position. One man says "build up the region as a tourist attraction." Another says specialized kinds of manufacture should be stressed. Still another points to aviation while a fourth plumps for foreign trade. Emphasis on any of these lines of development need not exclude the others, is another man's opinion.

There is an awareness, too, that ways and means must be found to fill in the gap left by the exodus of textile plants. Proposals include research on synthetic fabrics, improvements in the forest and wood products industry, further growth of recreation business, further development of exports of New England industry, and expansion of assembly plants for regional and export markets.

One imaginative forecaster sees the possibility of future New England iron and steel industry founded on the import of high-grade Labrador ores.

Too, there are at least three organizations functioning in Boston whose sole purpose is to promote and finance new industry growing out of scientific research. One is American Research & Development Corp.; others are Venture Research and New Enterprises, Inc.

WITHIN THE REGION

New England has been referred to for so many years as a single unit that the uninformed often have taken homogeneity for granted. Of course, it is an error to think so. The war and postwar performance demonstrate that once again.

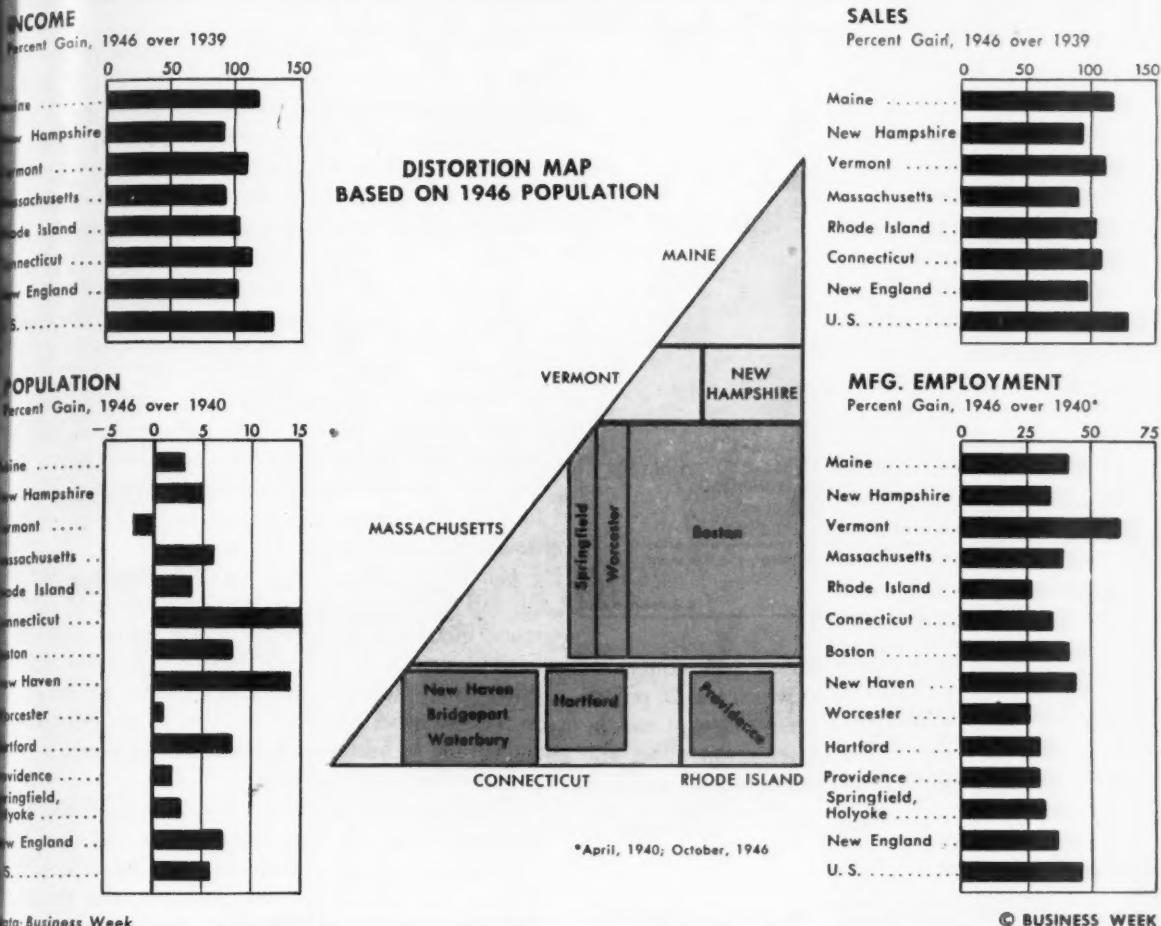
The northern trio of states—Maine, New Hampshire, and Vermont—diverged sharply from the economic pattern followed by the southern trio—Massachusetts, Connecticut, and Rhode Island.

All three of the southern New England states offer sharp comparisons to Vermont and its sister states. The southern group is heavily industrialized. Over 40% of its labor force fill factory jobs.

Therefore, the war boom in manufacturing brought significant population gains to lower New England. Population here has gained 8%, a far better showing than the rest of the region and even than the U. S. Because per capita income was already high, the gain did not appear so large percentagewise even though total income went up at a rate which was quite satisfactory.

CHECKING THE ANGLES ON OLD NEW ENGLAND

A breakdown of the New England market and of the changes in it since before the war



Data: *Business Week*

Look at Connecticut. It has the heaviest industrial concentration (43% of its labor force in factory jobs). High wages and overtime pay attracted many war workers who have stayed on. A good many of them came to the South although the transition in the case of the Negroes was in two steps—from the South to Harlem and from Harlem to Connecticut.

Income per person soared to \$1,406 in 1946, highest in the region, although the percentage gain from 1939 among the lowest. This is how the Nutmeg state compared with the rest of New England on this score:

	Per Capita Income		% Gain 1946 over '39	1946 as % of U.S.
	in 1939	in 1946		
Maine	474	1046	121	90
New Hampshire	548	1010	84	87
Vermont	483	1040	115	90
Massachusetts	719	1310	82	113
Rhode Island	678	1295	91	111
Connecticut	764	1406	84	121
New England	680	1272	87	110
U.S.	539	1162	116	100

The upper tier is much more agricultural. Farm employment accounts for one out of every 10 persons in the labor force. Accordingly, the typical wartime pattern for rural states of little or no population gains was followed here. Demobilization of native sons in late 1945 and 1946 brought population totals back to little more than prewar levels in the Maine-New Hampshire-Vermont area.

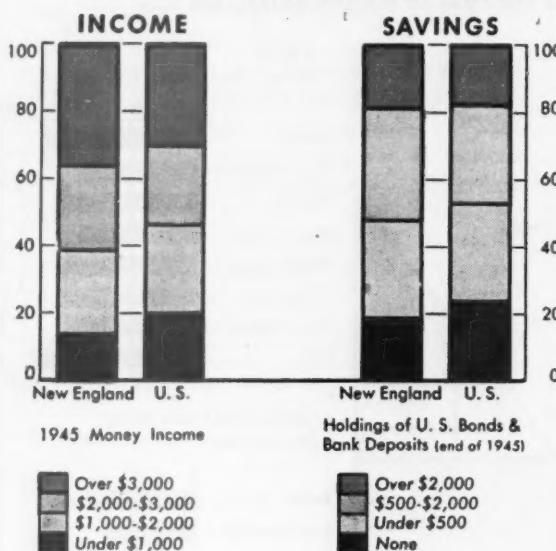
Generally, income in rural states outpaced income in industrial states during the war. That was experienced, too, in northern New England. Couple these income gains with relative population losses and you get surprisingly large per capita income gains. Taken together, the three northern states did better than the regional average on this count.

Consider Vermont. It has the smallest factory labor force component (29% vs. 38% for the region) and the highest farm component (17% vs. 4%). It also had the poorest population showing—an actual decline of 2% since 1940.

So what did the wartime experience do to Vermont income-wise? Total income went up 109%, which was

HIGH INCOMES, LARGE SAVINGS

Percent of all spending units,* by income and savings class



*Units in income classes and savings classes not necessarily same units:
Some persons with large incomes have small savings, and vice versa

Data: U. S. - Federal Reserve Board
New England - Business Week

© BUSINESS WEEK

eight percentage points better than all New England. Its per capita income rise was 115%, which was 28 points ahead of the region. The tax drain was lowest too in Vermont, with 6.6 cents out of every dollar taken out by the government (vs. 11.4 cents for New England and 11.0 for the U. S.).

Cities of the Region

Always known as the Hub City, Boston has played the most vital part in the region's economy. From this leading metropolis have radiated lines of communication and transportation, which have tied other parts of New England to it.

Boston is the principal banker of New England. The First National of Boston, by itself, has a quarter of all regional deposits and a third of all commercial loans.

Boston is the principal seaport—from which fewer goods are exported than imported. Many New England export shipments move out of the Port of New York.

Boston is the wholesale and retail center of the area. Jordan Marsh is building a new department store. The city also lays claim to being first in developing a regional shopping center in suburban Beverly.

Industry is greatly diversified—shoes (French, Shriner & Urner), leather (American Hide & Leather), textiles, electrical goods, machinery (United Shoe Machinery), soap (Lever Bros.), rubber products (Boston Woven Hose & Rubber), chemicals (Dewey & Almy).

Providence is typical of many industrial cities of the region in that company and product names are nationally known while the city of origin often isn't. Examples are Gorham silver, Crinnell sprinklers, Nicholson files, and

Coats thread. Providence is the second city of New England, with industrial emphasis on textiles, principally woolens and worsteds. Jewelry and machine are important. Textiles and jewelry lines were hit quite by the early 1947 soft goods decline but picked up again as the year advanced.

Worcester is jammed to the hilt with industry. Factory space is practically nonexistent—so scarce that the late entry remodeled an old car barn. Norton Co. is adding a new factory for making vitrified grinding wheels and a new refractories building. Heavy demand for textile machinery is indicated by the high level of employment and rate of operation at Crompton & Knowles Loom Works.

Springfield, which is heavy on metal and machine industries, plunged into war work rapidly and, except for a strike period in the spring of 1946, has been rolling peacetime industrial records since the war. Two large war plants have been taken over by long-established companies. Indian Motorcycle is vacating its original plant and moving into the former Reynolds Metals Co. building. Package Machinery Co. sold its old plant and moved into the East Longmeadow plant built for Pratt & Whitney Division of United Aircraft.

Hartford boomed in wartime mainly because of United Aircraft's location in East Hartford. Much of the prime space used by that company is not now utilized. Headquarters for more insurance companies than any other city, Hartford has a solid core of white-collar workers to offset industrial workers whose jobs are more susceptible to business change. That accounts for a sustained volume of retail trade.

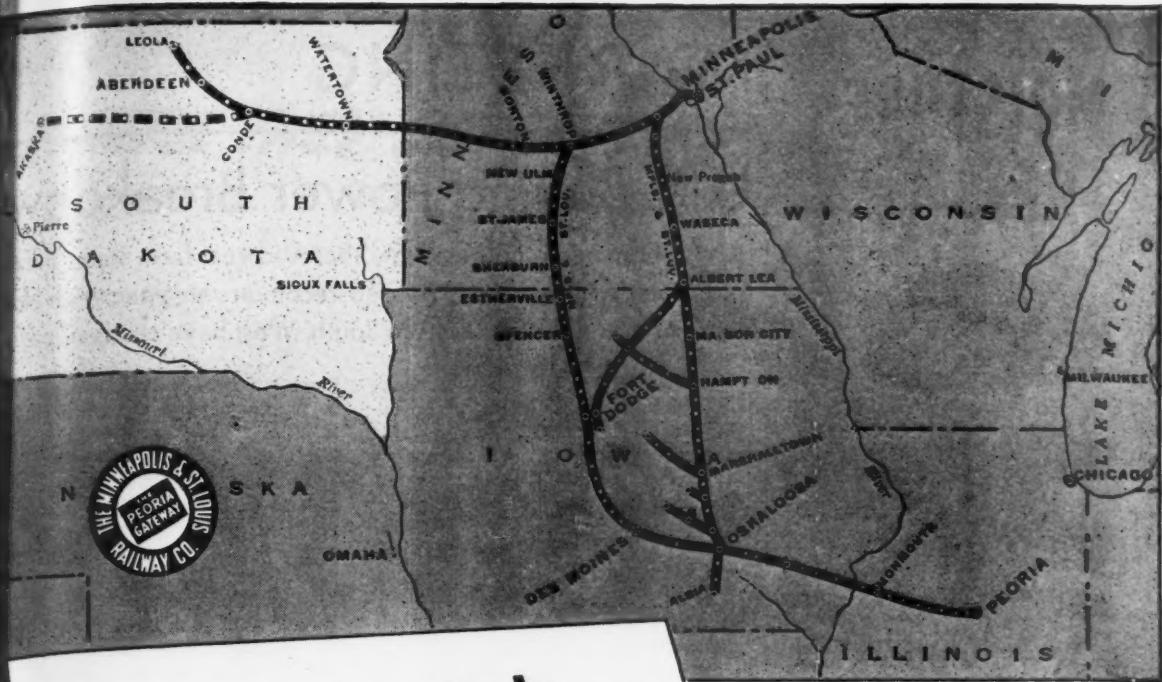
New Haven and adjacent cities, Bridgeport and Waterbury, racked up the biggest population and manufacturing employment gains. Munitions making in both World Wars is symbolized in New Haven by the Winchester Repeating Arms plant. However, its employment didn't skyrocket in World War II as it had in the first World War. Consequently, the postwar adjustment was not as severe this time.

The cities of New England dominate the region completely that their importance cannot be understated. Their functions in the fields of manufacturing, trade, service, transportation, and communication are the great factors which make the whole economy move.

They denote the main characteristic of New England—a region of maturity and a highly concentrated market.

REPRINTS AVAILABLE

Copies of this Report to Executives, coupled with a three-page Market Data Supplement, will be available in color reprint form in about two weeks. Single copies will be mailed to Business Week subscribers upon request without charge—to nonsubscribers for 20¢. Additional copies will be billed at the rate of 20¢ apiece. On orders of 11 or more, quantity prices will be quoted on inquiry. Address orders for reprints to Paul Montgomery, Publisher, Business Week, 330 West 42nd Street, New York 18, N. Y.



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MARKETING

U. S. Buying Power Breakdown

Commerce figures show that Midwest farm states did best on per capita income in 1945-46 reconversion year, with Northeast next. But wartime shifts to South, West have changed pattern

How did U. S. individual buying power shake down after the war? Marketing men have long pondered that question. The Dept. of Commerce this week became the answer man when it gave its official estimates of income payments and per capita income (box, page 56). These are made by states and regions, for 1946, with revisions for past years.

• **Farms Fare Best**—In the reconversion year from 1945 to 1946, Commerce shows that farm states of the Midwest fared best; northeastern re-

gions of the country did next best. Income in most of the South and West in that year rose less sharply than did the U. S. average.

This performance contrasts with wartime changes. The war saw gains in buying power in the South and West at the expense of the Northeast. And the wartime shifts of shadow in importance the slight reversals that took place last year. The postwar market picture still differs sharply from the prewar 1940 situation in that income shares have moved in

Commerce Dept.'s Figures vs. Business Week's

Now that the Commerce Dept. has released its 1946 estimates of income, population, and per capita income, marketing men naturally wonder: How do Commerce's figures stack up with Business Week's in the "New American Market" series?

Here are the percentages by which Business Week's estimates ran over (+) or under (-) the estimates of Commerce:

	Income	Pop.	Per Capita
Far West . . .	-1.3%	-2.3%	+1.0%
Great Lakes . . .	0	+0.5	-0.5
Mid. Atlantic . . .	-0.2	+0.4	-0.2
Southwest . . .	-0.1	-0.1	0

• **Either Way**—The largest difference in the two sets of statistics, 2.3%, appears in Far West population. Business Week estimated the Far West 1939-1946 gain as 31%. Commerce put it at 34%. Either way, the Far West obviously far outstripped the U. S. gain of 7%.

More significantly, compare the estimated Far West share of U. S. markets. Populationwise, the Far West was 8.6% of the U. S. in 1939. On Business Week's estimate, it had grown to 10.6% in 1946. According to Commerce, it was 10.8%.

• **No Real Difference**—Some of the divergences among state figures naturally are larger. But, generally, they too are quite small. And,

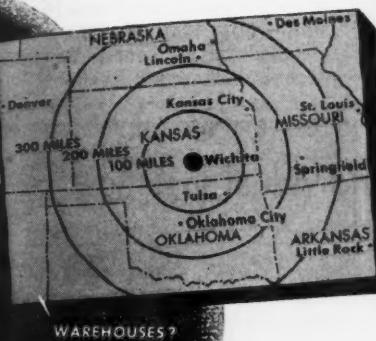
almost universally, the slight statistical discrepancies make no real difference to postwar marketing appraisals.

What's more, even the newest Commerce estimates are preliminary. They are subject to revision, just as 1945 statistics were revised this year.

• **Revisions**—Statistics that appear in future Market Data Supplements made available with report reprints will be based on Commerce's new figures. Any revisions necessary in statistics previously printed, for regions already surveyed, will be handled in the final, nationwide summary report on "The New American Market" which will close the series.

One minor difference will remain between the Business Week and the newly published Commerce income figures. Business Week's state and regional estimates are geared to a U. S. income total of \$162.5 billion for 1946, estimate released by Commerce in February. Commerce's data are geared to a newly estimated total of \$169-billion, or 4% larger. For consistency, all Business Week estimates for regions will continue to gear to the older U. S. estimate. This will not affect the relative comparisons between regions that are all-important for marketing.

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the Northeast to the South and West.

• **Per Capita Pattern**—Per capita incomes moved along somewhat different patterns. They reflect state-by-state changes—not only in income, but also in population (BW—Aug. 16 '47, p62). For example, the far western states boast the nation's best gains in population as well as income. As a result, increases in income per person were, on the whole, near average.

By contrast, some of the midwestern farm states that racked up sharp income gains due to high food prices also lost population as agriculture mechanized. Result: near-phenomenal jumps in per capita income. North and South Dakota are cases in point: They have more than tripled their income per person since 1940.

Most southern states registered con-

siderably better-than-average gains in per capita income. Total income jumped, and population changed little.

• **No Consistency**—Market changes vary as much from one state to another within regions as they do from area to area over the nation. Take, for example, Illinois and Indiana, which stand side by side geographically. Illinois' 1946-1946 income gain was as much behind the nation's as Indiana's was ahead (Illinois 109%; Indiana 136%; U.S. 123%).

• **Business Survey**—Also published this week was Commerce's August, 1947, "Survey of Current Business." In it Commerce experts Charles F. Schwartz and Robert E. Graham, Jr., go back of the over-all totals into a variety of detailed regional tables, analysis, and technical exposition.

Postwar Changes in Individual Incomes

	Income Payments to Individuals			Per-Capita Income				
	1945	1946	% Change 1945-1946	1945	1946	% Change 1945-1946		
United States...	\$185,201	\$169,373	+9	+123	\$1,177	\$1,200	+2	+109
*New England...	10,860	11,995	+10	+96	1,305	1,320	+1	+83
Maine.....	847	917	+8	+85	1,048	1,044	0	+105
N. H.....	460	543	+18	+102	977	1,048	+7	+92
Vt.....	331	383	+16	+15	1,009	1,085	+8	+108
Mass.....	5,631	6,269	+11	+90	1,340	1,356	+1	+77
R. I.....	956	1,006	+5	+97	1,333	1,347	+1	+88
Conn.....	2,635	2,877	+9	+103	1,468	1,465	0	+77
*Mid-Atlantic...	37,604	41,493	+10	+96	1,446	1,471	+2	+91
N. Y.....	20,454	22,895	+12	+94	1,588	1,633	+3	+89
N. J.....	5,774	6,161	+7	+96	1,516	1,494	-2	+86
Pa.....	11,376	12,437	+9	+100	1,220	1,238	+1	+97
*E. N. Central...	34,128	37,395	+10	+119	1,293	1,305	+1	+103
Ohio.....	9,114	9,808	+8	+78	1,329	1,302	-2	+102
Ind.....	4,102	4,386	+7	+136	1,168	1,158	-1	+114
Ill.....	10,695	12,019	+12	+109	1,427	1,486	+4	+105
Mich.....	6,799	7,379	+9	+115	1,218	1,215	+0	+87
Wis.....	3,418	3,803	+11	+134	1,159	1,198	+3	+132
*W. N. Central...	13,170	16,221	+16	+139	1,044	1,134	+9	+140
Minn.....	2,614	3,082	+18	+116	995	1,090	+10	+114
Iowa.....	2,375	3,012	+27	+144	996	1,183	+19	+144
Mo.....	3,776	4,349	+15	+127	1,063	1,143	+8	+126
N. D.....	566	624	+10	+163	1,097	1,162	+6	+216
S. D.....	598	673	+13	+178	1,112	1,228	+10	+227
Neb.....	1,333	1,489	+12	+162	1,086	1,164	+7	+169
Kan.....	1,908	1,992	+4	+163	1,076	1,062	-1	+152
*S. Atlantic...	17,410	18,670	+7	+139	936	958	+2	+119
Del.....	393	430	+9	+80	1,429	1,493	+4	+67
Md.....	2,501	2,716	+9	+122	1,303	1,293	-1	+81
D. C.....	1,607	1,736	+8	+92	1,377	1,569	+14	+45
Va.....	2,648	2,755	+4	+144	971	952	-2	+112
W. Va.....	1,472	1,656	+13	+118	869	914	+5	+100
N. C.....	2,621	3,031	+16	+168	749	817	+9	+159
S. C.....	1,303	1,407	+8	+158	686	729	+6	+155
Ga.....	2,445	2,567	+5	+160	813	809	-1	+157
Fla.....	2,420	2,372	-2	+163	1,049	1,010	-4	+114
*E. S. Central...	7,626	7,953	+4	+164	744	740	-1	+164
Ky.....	1,957	2,163	+10	+146	751	778	+4	+153
Tenn.....	2,443	2,535	+4	+174	866	843	-3	+166
Ala.....	2,021	2,073	+3	+172	747	733	-2	+174
Miss.....	1,205	1,182	-2	+167	570	555	-3	+175
*W. S. Central...	11,532	11,906	+3	+147	884	866	-2	+135
La.....	1,986	1,982	-0	+134	832	784	-6	+120
Oklahoma.....	1,801	1,848	+3	+123	849	825	-3	+132
Texas.....	6,527	6,748	+3	+154	975	954	-2	+131
Ark.....	1,218	1,328	+9	+169	659	697	+6	+177
*Mountain...	4,539	5,014	+10	+141	1,109	1,159	+5	+132
Mont.....	555	669	+20	+108	1,228	1,394	+14	+143
Idaho.....	525	588	+12	+153	1,112	1,243	+12	+183
Wyo.....	287	335	+17	+122	1,153	1,264	+10	+109
Colo.....	1,271	1,380	+9	+134	1,185	1,196	+1	+128
N. M.....	448	491	+10	+158	850	911	+7	+156
Ariz.....	594	627	+6	+164	1,026	995	-3	+110
Utah.....	649	689	+6	+160	1,073	1,063	-1	+121
Nev.....	210	235	+12	+155	1,511	1,703	+13	+104
*Pacific...	18,332	19,726	+8	+169	1,458	1,468	0	+94
Wash.....	3,052	3,118	+2	+184	1,406	1,346	-4	+113
Ore.....	1,631	1,729	+6	+172	1,231	1,188	-4	+105
Calif.....	13,649	14,879	+9	+165	1,503	1,531	+2	+90

* Computed from Dept. of Commerce data.

Liquor Pricing

New York fair trade law in effect Sept. 1 stops price wars. Dealers pleased, but consumers fear it means higher prices.

New York State liquor retailers—and the distillers who supply them—sighed with relief this week: With fair-trade pricing of alcoholic beverages becoming mandatory Sept. 1, there will be no more of the widespread price-cutting in New York which has been prevalent since the move was announced (BW-Jun.21 '47,p.67).

Among the most joyful will be members of Veterans' Package Stores Assn. and Metropolitan Package Stores Assn., currently battling each other over credit for having lobbied compulsory fair trade into existence. Actually, all levels of the liquor trade exerted pressure for it.

But consumers may not face the new arrangement quite so serenely.

• **In Other States**—In adopting compulsory fair trade for liquor, New York joins Kentucky and New Mexico, previously the only states with this type of regulation. Illinois is readying a similar move, to become effective in September or October.

Many New York dealers have slashed prices recently in an effort to get rid of slow-moving stocks before the mandatory minimums went into effect. And consumers got used to shopping around for the best bargains.

Now, with minimum prices the same at every liquor store, dealers in nonresidential districts stand to lose somewhat. Commuters living in New York State will no longer bother carrying bottles home on the train when they can buy at the same price in the neighborhood store.

• **Established Practice, But**—Fair-trade pricing for liquor is not new in New York, but filing has been voluntary. All the big distillers and many of the smaller ones have fixed minimum resale prices under the state business laws. However, enforcement has been lax. The only action a distiller could take to prevent a dealer from selling below the established price was to initiate injunction proceedings. Few distillers took this action. Even those who did obtain injunctions didn't want to sue for damages. After all, the potential defendants were customers.

Under the new setup, dealers are not likely to attempt evasion of fair-trading. This time the state will be the plaintiff, and the law has some long, sharp teeth in it. Maximum penalties for violations include a ten-day suspension of license for the first offense, a 30-day suspension for the second, and

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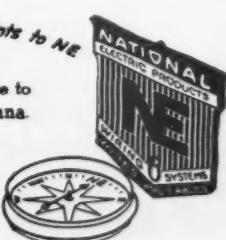
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revocation of selling privileges for the third.

• **Closing Out Sales**—The law leaves one way out for the dealer stuck with merchandise that won't move. When he wants to unload an item, he notifies the distributor or brand agent, who then has an option to pick up the goods within 20 days.

If the distributor doesn't take them back, the dealer applies to the State Liquor Authority for permission to close the item out. Upon receiving authorization, the dealer sells the item at what he desires. But he is prohibited from handling the item again for a year.

• **Private Brands**—One group of liquors will still be exempt from fair-trade laws: the private-label variety handled chiefly by big department stores such as Macy's, Gimbel's, and Hearns in New York City. The chief competitive advantage will result from the store's ability to price the private brands below the more widely known liquors.

Several companies are ready to provide the liquor for smaller stores that want to promote a private brand. The customary requirements are that the dealer register his label with the fed-



BORDEN'S NEW BABY

Elsie, the most famous cow in the U. S., has hit the jackpot for Borden's again, with a bit of "act of God" publicity. She's the mother of a fine new bull calf. Its birth interrupted a public appearance at Macy's department store in New York as Elsie was rushed off to her home farm.

Macy's played up the event in a newspaper splurge, and Borden's is offering \$25,000 in a baby-naming contest. Each contestant will have to name the dealer from whom he buys Borden products. The winners will get \$20,000. The rest will go to the dealers whom the winners name.

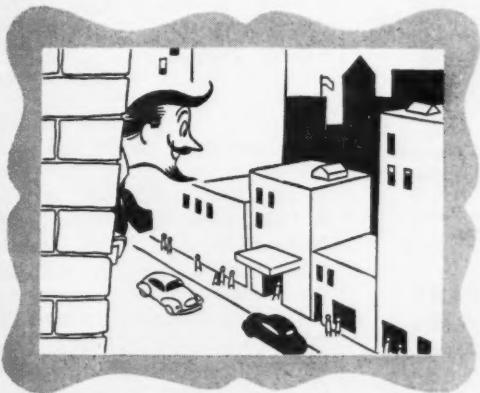
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1. Artful Art, the artist, is a painter of renown who picks the Pennsylvania every time he comes to town. Says Art: "They surely make an art of hospitality. They really treat me like a guest, which *really* pleases me!"



3. Now see the artist rising up, like Venus, from the waves. "This Statler bath's a seascape that is tops with me," he raves; "The floods of steamy water and the soap that keeps me clean, the piles of towels, snowy-white, all make a perfect scene!"



5. Adds Art: "The swell location here is something else you'll like. To shops or shows or business you won't have a lengthy hike. The Pennsylvania's centered in the heart of New York City, so when you stay at this hotel, you're really sitting pretty!"



2. This portrait of the artist is one of his favorite poses, for Statler beds are far more soft than any bed of roses. Eight hundred thirty seven springs—a sleep-producing number—float Art to rest on what he calls, "A Masterpiece of slumber!"



4. "Just eat a Pennsylvania meal, and then you'll know it's true their skillful chefs, without a doubt, are noted artists, too. Their meats, desserts, and salads make me eat without restraint. With Pennsylvania food around, I'd rather eat than paint!"

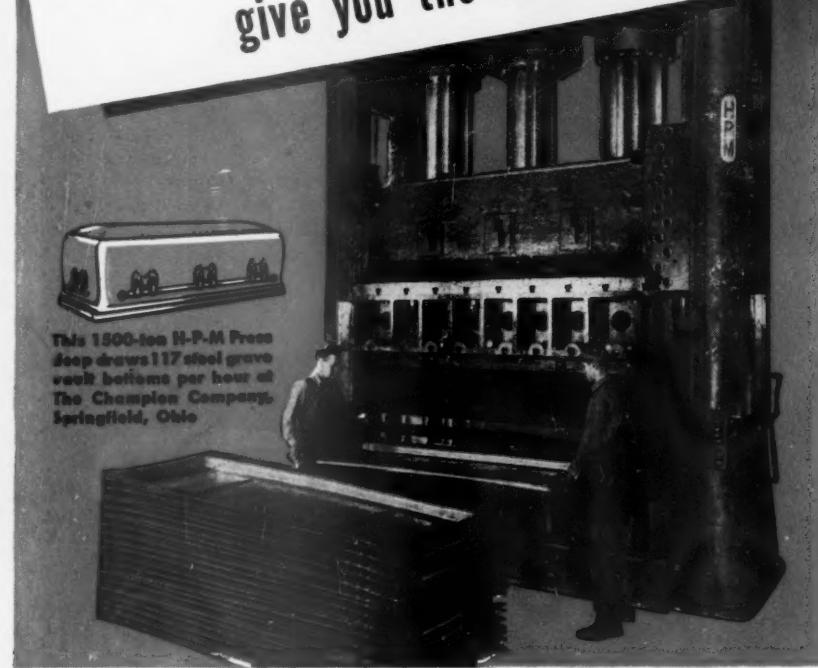


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eral and state governments, buy in 25-case lots.

• **Higher Prices?**—Distillers report that the fair-trade prices after Sept. 1 will not differ from those previously in effect under the voluntary filing. They worry, however, that the absence of price-cut liquor may cause consumers to think that the fair-trade law means price increases. In the short run, at least, many of the consumers will be right.

REFRIGERATOR PRICES UP

Rising production and material costs—and shortages which slow down production—are forcing up the prices of home appliances.

Both the Frigidaire Division of General Motors Corp. and Philco Corp. last week raised prices on several electric refrigerator models.

Frigidaire refrigerator prices have advanced \$5-\$15 on all but three models said P. M. Brattan, general sales manager. Electric range prices went up \$5-\$10 (no increase on two models); automatic dishwashers were boosted \$15. Home freezers, electric dryers, and ironers were unchanged. Prices of commercial refrigeration and air conditioners were raised 2½%.

Philco Corp. raised prices an average of 8% on four of its 12 lower-priced lines.

WANAMAKER TO DELAWARE

For years John Wanamaker, Philadelphia merchant, has had an eye on Wilmington, Del., heart of the du Pont empire, and only 30 mi. from Philadelphia.

Last week plans for a \$1-million, two-story department store were on the drawing board. A five-acre site had been bought, but the final go-ahead awaited the pleasure of the Wilmington City Council. The site is in a residential area, must be rezoned for the store.

P. S.

Independent grocers did a bigger volume of business in the first half of 1947 than during the same period in 1946, according to a survey by the National Assn. of Retail Grocers. Average increase was 22%; only 13% of the respondents said business was off.

Colorado's Supreme Court has invalidated a proposed Denver ordinance to regulate coal retailers. The ordinance: (1) raised license fees to \$100 for the first delivery truck, \$5 for each additional truck; (2) required coal dealers to maintain an office within the city. These regulations, said the court, discriminated against Denver's many "one-truck" operators.



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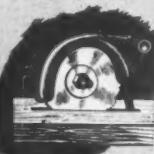
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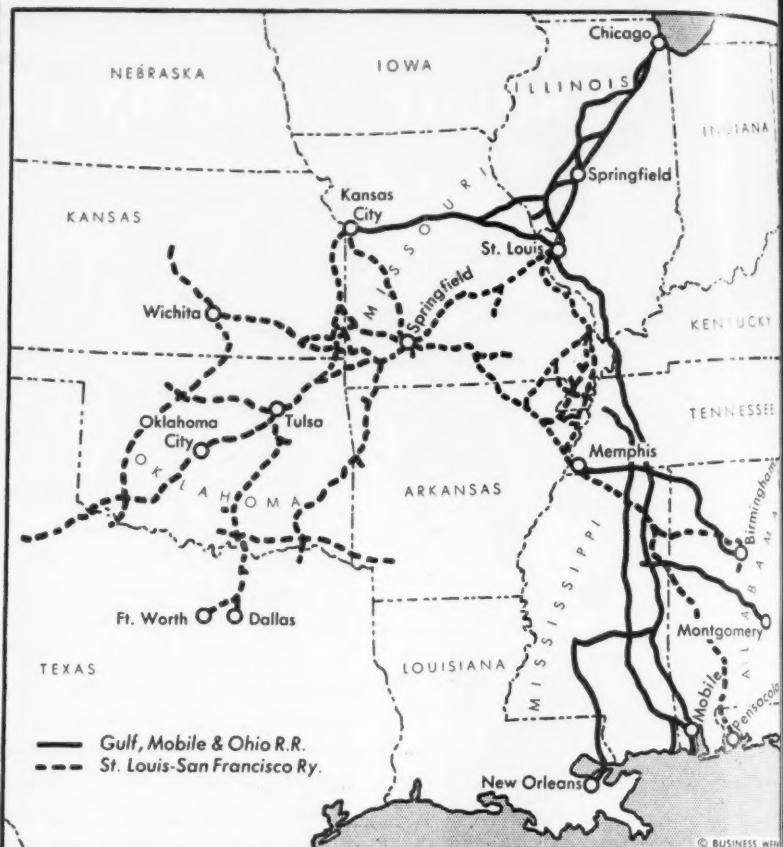
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(THE MARKETS—PAGE 90)



Another Rail Merger?

Expanding Gulf, Mobile & Ohio and just-reorganized Frisco talk over the possibilities. Refinancing plans are still under study. Union would bring together 8,000 miles of lines in 11 states.

Chesapeake & Ohio Ry.'s Robert R. Young (BW—May 24 '47, p70) isn't the only railroader who is merger-conscious these days. The same bug has bitten several other rail men.

Latest to disclose current ambitions along such lines: Isaac B. Tigrett, president of the Gulf, Mobile & Ohio R. R., and Clark Hungerford, president of the newly reorganized St. Louis-San Francisco Ry. Tigrett is one of the real merger veterans of railwaydom (BW—Apr. 28 '45, p74).

• **Study**—According to a statement by Tigrett and Hungerford, both roads are now evaluating the direct and potential benefits that consolidating the two complementing rail properties might bring about.

This consolidation, if it should go through, would produce one of the biggest rail systems operating in the mid-continent region (map). It would also

be the most ambitious merger job accomplished in railroading in many a day. Under single ownership would come 8,000 miles of lines extending into 11 states east and west of the Mississippi. This is a mileage total and breadth of service, few competitors could equal.

• **Extent and Scope**—From Chicago, St. Louis, and Kansas City, for example, trackage of the new system would extend:

- **Southward** (via the important Memphis traffic gateway on one route) to the busy East Gulf ports of New Orleans, Mobile, and Pensacola.

- **Southeastward** to Birmingham, the "Pittsburgh" of the South, and Montgomery, Ala.

- **Southwestward** to Oklahoma City, Tulsa, Fort Worth, and Dallas.

The system also would control the shortest rail routes now existing be-



MERGER VETERAN, I. B. Tigrett of Gulf, Mobile & Ohio weighs another.

tween such important traffic producing and interchange areas as:

- St. Louis, Memphis, and Birmingham;
- Kansas City, Memphis, and Birmingham;
- Kansas City, Tulsa, Fort Worth, and Dallas.

• **Speaking of Money**—Financially the new system would also be something to write home about. The merger would combine road and equipment recently carried on the books at a value of some \$500-million net. And working capital, if the consolidation had taken effect at the end of June, would have totted up to around \$50-million.

Interest requirements of the Gulf, Mobile now run around \$2.8-million. About \$1.6-million of this is on a fixed basis. The remaining \$1.2-million is payable only to the extent that earnings permit.

• **Balance Sheet**—Frisco's interest burden is quite a bit heavier. Its fixed interest requirements tot up to about \$3-million annually. And there is something over \$2.1-million more on a contingent basis.

This indicates annual fixed charges of \$4.6-million and contingent interest approximating \$3.3-million for the proposed new system. And that's if the capitalization of the two roads is taken into the merger undisturbed.

If operations should hold around the levels of recent years, that interest load should not prove too heavy a burden for the combined property. In 1945, for example, joint gross revenues exceeded \$190-million. Almost \$19-million was available for fixed and contingent interest charges. Over \$18-million was available in 1946, when gross fell off to \$160-million. And over \$8.8-million was available in January-June, 1947.

• **Stock Disposal**—Thus far Wall Street has heard of no concrete proposals for the treatment of security holders if the two managements decide that merger is

a good bet. However, present capital structures of the G. M. & O. and Frisco appear to offer no insurmountable problems. Each is relatively simple.

Gulf, Mobile (even after its merger with the Alton) now has outstanding only some \$67-million of long-term fixed and contingent interest obligations; 283,439 shares of \$5 preferred; and around 917,000 shares of no-par common stock.

The Frisco has a similar uncomplicated capital structure, since it only emerged from the reorganization wringer the first of the year. Its outstanding securities now include about \$128-million of funded debt (either fixed or contingent interest); 619,000 shares of \$100-par 5% preferred; and 1,241,000 shares of common.

• **How It Might Be Done**—According to Wall Streeters who claim to be in the know, officials working on the merger study are now considering two security-exchange proposals. One is said to involve the organization of a new company with a straight share-for-share exchange of stock, and a dollar-for-dollar exchange of the bonds. The second would have the Gulf, Mobile & Ohio assume Frisco's outstanding funded debt, then exchange its own shares for Frisco common and preferred on an equal-switch basis.

The second plan is reported to be favored at the moment. And that's not surprising: It is a procedure that has been followed many times in consummating rail mergers.

• **Stock Ranges**—Gulf, Mobile stockholders, however, probably would reject any share-for-share exchange proposal at the moment. Frisco preferred is now selling on the Big Board at around \$32 a share vs. the \$43 price that G. M. & O. preferred commands. Frisco common is selling at around \$9 compared with today's \$12.50 cost of Gulf, Mobile common.

Such a differential in favor of the G. M. & O. shares is natural enough. Despite its greater size, the Frisco has never been a particularly profitable property. This is evidenced by its successive reorganizations in 1896, 1916, and 1947. The last one followed a stay of some 14 years under protection of the bankruptcy courts.

The last revamping of Frisco's financial structure was a drastic one, and this may change its luck where stock-earnings are concerned. It has yet to prove its ability to stand up under fire without cracking, however. And the prices of its shares today, obviously, reflect this lack of "seasoning."

• **Leadership Helped**—Under the leadership of "Ike" Tigrett, on the other hand, the Gulf, Mobile & Ohio has proved its ability to take quite a fiscal beating without losing its solvency.

Tigrett, a native of Tennessee, didn't



Like the friendly smile, the firm handshake, the tipped hat . . . fine business stationery greets your correspondent the right way — immeasurably enhancing what you say. Make certain with your printer that the finest paper represents you. FOX RIVER PAPER CORPORATION, Appleton, Wisconsin.

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Look through-----
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see all three!

1 COTTON FIBRE
2 100, 75-50 or 25%
COTTON FIBRE CONTENT
3 MADE by Fox River



The loan that staked a million meals

THE famous Stouffer chain of restaurants began in a small dairy stand in Cleveland. Stouffer meals drew a full house from the start.

Under a thrifty and aggressive management, one restaurant became five... then ten... in Cleveland, Detroit, Pittsburgh, and Philadelphia.

By 1937 Stouffer's was ready to open in New York City. The move had its risks. Competition would be keener, costs higher. But success would mean a big boost to their standing. New York was a logical goal.

The immediate problem was working capital. Expansion during the previous ten years had absorbed most of Stouffer's earnings. The Company came to the Bank of Manhattan.

The Bank traced Stouffer's record in other cities. Everything pointed to their ability to make a successful place for themselves in New York.

The Bank extended Stouffer's a line of credit which made possible the Pershing Square restaurant. Other loans helped start other branches, Stouffer's first two New York restaurants served over a million meals, in their opening year.

Today, the firm operates fifteen restaurants in seven cities, and others are being planned.

This is one more example of the Bank of Manhattan's readiness to assist sound businesses, with funds and seasoned counsel, at vital turning points in their careers.



Bank of the Manhattan Company

NEW YORK

MEMBER FEDERAL DEPOSIT INSURANCE CORPORATION

become a railroader until his early thirties. His debut came in 1912, after 13 years as cashier of two Tennessee banks. At that time he was persuaded to become president of the 49-mile-long Birmingham & Northwestern.

• **Uncanny Knack**—Since then, he has enjoyed plenty of experience—and success—in railroading. A glance at the system he now heads is good proof. Its present prominence as a major Great Lakes-to-the-Gulf carrier is due entirely to an uncanny ability of Tigrett. He has been able to pick up on advantageous terms via lease or merger, other rail properties that can be counted on to tap new and profitable sources of traffic for his own system.

The Gulf, Mobile & Ohio, for example, doesn't own the mileage that gives it an entrance into New Orleans (and thereby a substantial share of the huge amount of export and import freight flowing through the port). That was acquired in 1933, when it leased the properties of the New Orleans Great Northern Ry Co.

• **Webbing Out**—A similar Tigrett inspired deal was the early summer merger with the Alton R. R. This extended the Gulf, Mobile from St. Louis into Chicago and Kansas City, and made the road a not-to-be-overlooked North-South rival of the Illinois Central.

Wall Streeters are a little surprised that Tigrett hasn't waited until G. M. & O. digested the Alton deal. But they are sure that he is the catalyst in the negotiations with the Frisco.

• **Insurance Interests**—They wouldn't be surprised, however, if some of the big insurance companies had a finger in the pie, too. Insurance interests emerged as large holders of Frisco stock taken in exchange for bonds of the old company when that road finally completed reorganization proceedings. J. W. Stedman, Prudential Insurance Co.'s rail expert, resigned recently as an Erie director to become chairman of Frisco's executive committee.

BANK STRIKE ENDS

The nation's first major bank strike has petered out without making a dent in the Brooklyn (N.Y.) Trust Co.'s original firm position. After a month on strike, Local 96 of the Financial Employees Guild (C.I.O.) has capitulated with a back-to-work vote.

The Brooklyn Trust Co. refused to negotiate with Local 96. Its reason: The union hasn't been certified as a bargaining agent. The bank's official comment:

"Certain of our former employees who voluntarily left our employ during the past 31 days have applied for reinstatement. In cases where vacancies exist in the positions applied for, such persons will be notified by telegraph. . . ."

Family of Texas

has created a life that tops most Western thrillers
(No. 6 in a series of "Good People to Know")

meaning and dignity to the western ranch tradition . . . the Gunns also typify the modern approach to farming—the attitude that farming is a happy means to a happy end, good living.

Both Roy and Maggie were born on ranches. Roy's first job was breaking wild horses. Maggie, his "pardner" from their youth, used to take 'em from there and school

'em. Their three kids are Gunns of the same calibre. Even 8-year-old Sammy has a hand in running the family ranch.

This is a robust, refreshing story of a family which gets a big bang out of life and which could probably lick any kind of problem. It is a story which will inspire many another of America's farm families in their search for a larger, fuller life on the land.



4. CEDAR TREES on the ranch furnish posts for the miles of fences needed. Tate, 17, FFA-chapter president and aiming for Texas A&M., carries a load of cedar posts onto the truck.

5. ROY'S WIFE, Maggie, likes to cook, sew and manage the garden for the family. But like the other Gunns she prefers to ride the range, often lends a hand with the animals.

6. WHITEY, a Mexican burro, plays triple role as pack animal, saddle donkey or cart horse. Sammy, 8, atop Whitey, adheres like a burro to anything four-legged, at any speed.

people
Country

Better Farming, Better Living



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perfect shipping month
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**THE
WEIGHT
OF
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OPINION**

In 1946, 693 advertisers placed 3,239 pages of business-goods and services advertising in the pages of this magazine.



... more than the total for all other general business magazines—combined.

BUSINESS WEEK	3239.43
Magazine 2	1320.63
" 3	482.67
" 4	312.25

LABOR



SIGNING CONTRACT: In the heat of a summer's night, representatives of Ford and U.A.W. reach a last-minute agreement before the Taft act takes effect. Present are (from left to right) Ford's Mel Lindquist, John Bugas; U.A.W.'s Richard Leonard; (rear) Ford's Malcolm Denison, Manton Cummings; U.A.W.'s Maurice Sugar, Thomas Thompson.

Management Guards Its Gains

Industry increases vigilance to keep Taft law fully effective. But it has already lost ground: Unions' unabated propaganda sway public against the act; many contracts sidestep its provisions.

While most employers were still relishing the victory for management represented by passage of the Taft-Hartley act, two things were happening which robbed that victory of some of its early luster.

• **Unabated**—First, the union propaganda drive against what was stigmatized as a "slave labor" measure did not abate with the law's enactment. On the contrary, it gathered momentum and it gathered converts. The latest Gallup poll on the subject showed: A majority of the persons who had opinions on the bill favored amending or repealing the act which just last week became effective as law.

Management's side of the story—told so persuasively while the proposal was being debated—was being forgotten. Employer groups were failing to carry through with their information campaigns.

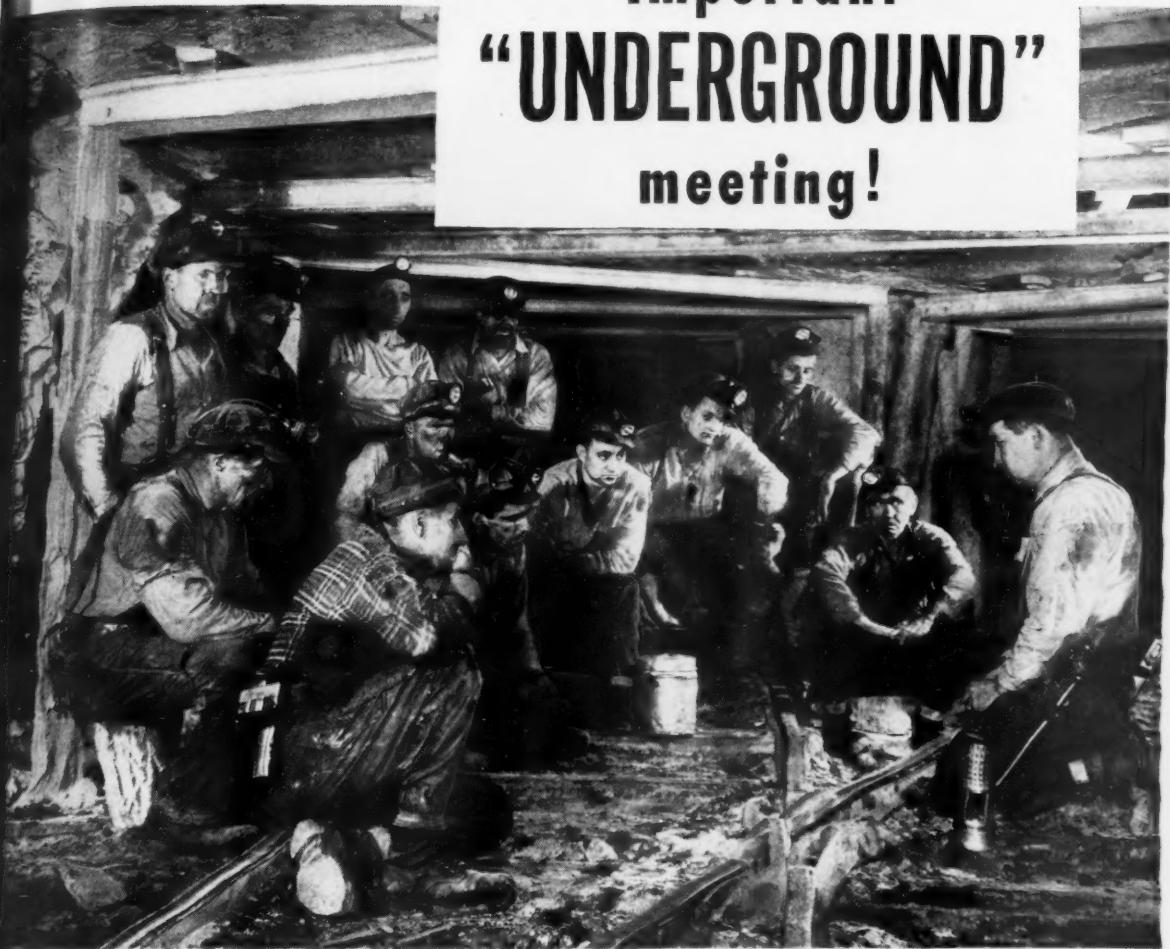
• **Getting Around It**—And second, the contract the coal operators signed with John L. Lewis was showing union lead-

ers in every industry how the new law could be bypassed in many important respects.

To that section of management which had striven mightily for the passage of the Taft law, these two developments marked lost ground. Employee associations were being prodded to sway the public on the need for giving the new statute a chance to operate before supporting amending legislation. And individual companies—reporting varying degrees of success—were fighting hard to hold on to their new and hard-won legal rights.

• **Union Moves**—Meanwhile the unions, richer by a backlog of public opinion which would have political utility in efforts to fight the law and its sponsors in the next election, still had the problem of living under the new set of rules. By strikes, horse-trading, threats, cajolery, they had managed to extend most union-security contracts for another year—the legal limit. By various dodges and stratagems, which Con-

Important "UNDERGROUND" meeting!



What the men in this photo are "plotting" is—their own safety. For this is a "safety meeting" conducted by a coal mine section foreman with his men to check on up-to-the-minute safety conditions.

Meetings like this are held regularly by all section foremen in America's progressive bituminous coal mines. They are just one phase of the never-relaxing safety program which has made coal mining now twice as safe as it was 40 years ago on the basis of man-hours worked—and more than four times safer if measured in tons mined.

America's bituminous coal mines are not only being operated with greater safety than ever before . . . but through skillful management and huge investments in mechanized equipment they are the most productive—and pay the highest wages—in the world.

LIVING CONDITIONS of coal miners are keeping pace with improvements in their working conditions.

Today, about two-thirds—over 260,000—of the nation's bituminous coal miners own their own homes or rent from private landlords; the remaining one-third live in company-owned houses...at rentals below those ordinarily available to workers in other industries. For example, *newly built modern homes* in the Appalachian region rent for as little as \$18 per month.

Home-ownership among miners is increasing—due in no small measure to encouragement and financial aid from mine owners who realize that a man becomes a better worker and a better citizen as he develops pride in "a home of his own."

BITUMINOUS COAL

BITUMINOUS COAL INSTITUTE

Washington, D. C.

Affiliate of NATIONAL COAL ASSOCIATION

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The "Train of Tomorrow"

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PRESSTITE SEALING COMPOUNDS

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Another example of industry's recognition of the superior qualities of Presstite Sealing Compounds is found in their use by Pullman-Standard Car Manufacturing Co., in the new General Motors "Train of Tomorrow."

In this latest passenger train development, Presstite No. 542 Permagum is used to seal around water and steam pipes and electric conduits where they pass through partitions or floors. Presstite No. 576 Permagum is used under retaining bolt heads of Astra Dome window units. In other types of car construction Pullman-Standard is utilizing Presstite No. 330 Enamelite, No. 500 Adhesive Felt Tape and No. 590 Extruded Glass Sealer.

Whatever your construction or assembly problem may be—if you require a protective seal against moisture, air, water, vapor or for any other purpose, send your specifications to "Sealing Headquarters." Our experience, laboratory, research and production facilities are at your service—write today.

Products of Presstite Engineering Company Serve These Industries

Refrigeration: Sealers for domestic and commercial refrigeration—Extruded plastic shapes—Moisture and vapor proof paper.

Automotive: Special body and fender sealing compounds—Sealers for spot-welded joints—Windshield sealers.

Aviation: Special seam sealing tape—Fuel tank and pressurized cabin sealers.

Railroad: Adhesive car cement—Protective coatings—window and glass sealers.

Building and Construction: Special build-

ing and sheathing paper—Caulking compounds—Greenhouse glass sealers—Concrete curing compounds—Sewer joint compounds—Expansion and contraction joint sealers.

Wholesale Jobbers: Roof coatings—Caulking compounds—Furnace cement—Patching plaster.

Miscellaneous: Corrosion resistant sealers for metal fabricated joints—Molded cork-asphalt shapes—Special adhesives and sealers for many other uses.



PRESSTITE ENGINEERING COMPANY

3936 Chouteau Avenue • St. Louis 10, Missouri

Form 1001

THE UNITED STATES OF AMERICA
THE NATIONAL LABOR RELATIONS BOARD

AFFIDAVIT

FOR USE IN CONFORMITY WITH SECTION 9 (c) (1)
OF THE NATIONAL LABOR RELATIONS ACT, AS
AMENDED JUNE 25, 1947

STATE OF: _____, ss.

COUNTY OF: _____

I, _____, being duly sworn, do hereby depose and say:

1. I am _____ of the _____ of the _____ of the _____.

2. I am not a member of the Communist Party or affiliated organization. I do not believe in or accept the principles of Communism. I do not believe in or accept the overthrow of the United States Government by force or by any illegal or unconstitutional methods.

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I, _____, being duly sworn, do hereby depose and say:

1. I am _____ of the _____ of the _____ of the _____.

2. I am not a member of the Communist Party or affiliated organization. I do not believe in or accept the principles of Communism. I do not believe in or accept the overthrow of the United States Government by force or by any illegal or unconstitutional methods.

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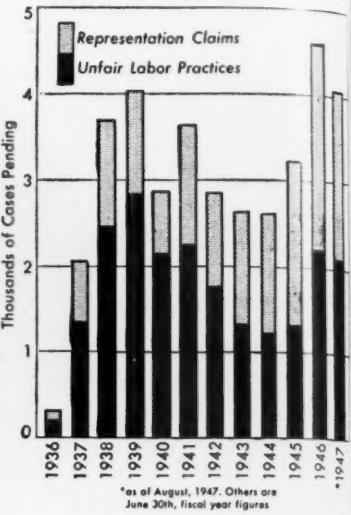
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NLRB's BUSINESS

The case load from beginning to end of the Wagner act



Data: National Labor Relations Board.

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will get a modest wage increase and old-age pensions. Under the other they will get a flat 15¢-an-hour boost and no retirement allowances. The union liability issue is sidestepped for a year, during which the union cannot be sued, while a joint study of the problem is being made.

The Murray Corp. took a three-week strike rather than give in on union liability. Settlement came on the eve of the deadline for the Taft-Hartley bill. The company finally agreed to give up an arbitration clause which had been in the previous contract, in return for a union-responsibility proviso. It will be a breach of contract at Murray—subject to civil suits under the provisions of the new law—if there are production impediments of any kind without first exhausting the grievance procedure.

• **Reaction**—Two other companies—International Harvester, and Cutter Laboratories in Berkeley, Calif.—felt the weight of the broad employer interest in union-responsibility deals when they announced settlements. Cutter reported its switchboard swamped by calls from indignant businessmen who assumed the company had followed the lead of the coal operators. And Harvester, to counter the impression that it had traded away management rights as set forth in the Taft-Hartley bill, took national newspaper space to reproduce its union-liability clause in full.

Actually, both companies retained a substantial measure of the new authority granted employers by the law. But both could testify to a growing management vigilance which is being roused to keep the Taft law from becoming a dead letter.



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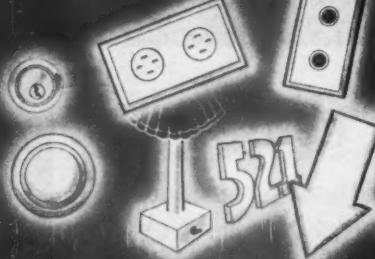
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Labor Joins In

At Oliver Iron Corp., union and management men cooperate on time studies. Firm pleased, extends plan to rank-and-file.

When this year's vacation season ends, the 84-year-old Oliver Iron & Steel Corp. of Pittsburgh is going to experiment with an experiment. It's looking for an answer to a question that interests management everywhere: How much of a role can labor be given in the operation of a business?

Seven years ago Oliver undertook what it concedes is still an experiment. It wanted an efficient time-study and production-methods department. But it was aware that too often the most carefully assembled department functions badly because of labor suspicion. • **Equal Representation**—Oliver put two and two together. By its arithmetic that meant coming out with a department manned equally by management men and representatives of C.I.O.'s United Steelworkers, which bargains for Oliver's 1,500 production workers.

This management idea was first made a supplement to the company's 1940 wage contract with the union. It has been in its agreements ever since. Today, four full-time joint time-study teams operate in the Oliver plant. The company thinks they're wonderful. And just as soon as all the rank-and-file employees get back from their vacations, Oliver is going to expand its labor partnership program—and keep on expanding it to as much as labor will take.

• **How It Works**—Here's how the plan works: When a union-member vacancy occurs on a team, notice of a vacancy is posted on the local's plant bulletin board. From the names of applicants turned in by the local, management selects one. The selection is based primarily on the employee's plant record, his education and adaptability. He is paid by the corporation.

The corporation's time-study department trains the new member of the team on the theory of the work and its practical application. Motion pictures and courses drawn up by the Methods Engineering Council and Prof. Ralph M. Barnes of the Industrial Engineering Department at the University of Iowa figure largely in the instruction.

• **Skirting Objections**—If the management or the union balks at a team's decision, several steps can be taken: (1) The team might be ordered to restudy the job; (2) it might be handed to another team; (3) if finally necessary, all four teams might make separate studies.

But generally a knotty problem is worked out through what might be



TEAMWORK ADVOCATE: Oliver Iron's T. F. Smith gets labor aid on standards.

called a collective bargaining review of the case. So far the program has worked smoothly.

Naturally the question arises: Has the management-labor joint time-study department proved its worth? Theodore F. Smith, Oliver's president, and other plant executives say it has. The firm has never made a machine-by-machine, plant-wide survey but in spot checks production has increased more than 50% in some cases.

Here again there is no final breakdown, as the figures available are a combination of job incentives, method changes, and job training.

• **Production by Harmony**—Oliver's management is satisfied that more harmony among the employees is created by a better understanding of the purposes of time study and method changes. Oliver never had a strike except for the nationwide steel walkout in 1946. The corporation is sure that satisfied employees produce more of its nuts, bolts, rivets, pole line hardware, small forgings, guard rail equipment, automotive, and railroad specialties.

TIPS ON COMMUNISTS

A recently launched information service for employers is beginning to see service in labor's own fight against its left-wing.

The service is produced by the American Business Consultants, Inc., New York City, in the form of a weekly publication—"Counterattack—The Newsletter of Facts on Communism." The newsletter apparently has some right-wing unionists among its subscribers. Information which it has published exclusively is finding its way into the right-wing labor press, and is being used as ammunition against the Communists.

Associated in the publication of Counterattack are several former FBI

Mr. T... has pudgy little pads tipping his broad, stubby fingers... is definitely not the man for picking pockets, pins or pickled peppers... repairing watches, hooking up dresses and splitting hairs. And most men aren't much better than Mr. T!

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C. of L. Restudy

Labor Dept. survey completed in October, will annual dollar cost of living for a family of four.

The Labor Dept. is taking complete, starting-from-scratch the cost-of-living problem since present index was first compiled years ago.

The new survey, which will be completed in October, is a more comprehensive study of the cost-of-living problem. For the first time in history, the government will say just how much it thinks the average American family of four should have earned to live "satisfactorily."

• **Started-and Stopped**—The government's Bureau of Labor Statistics finally started the survey two years ago at the request of a House appropriations subcommittee. But rapid increases in the cost of living and, more recently, uncertainty over BLS' 1947-48 survey virtually put a stop to work on the project.

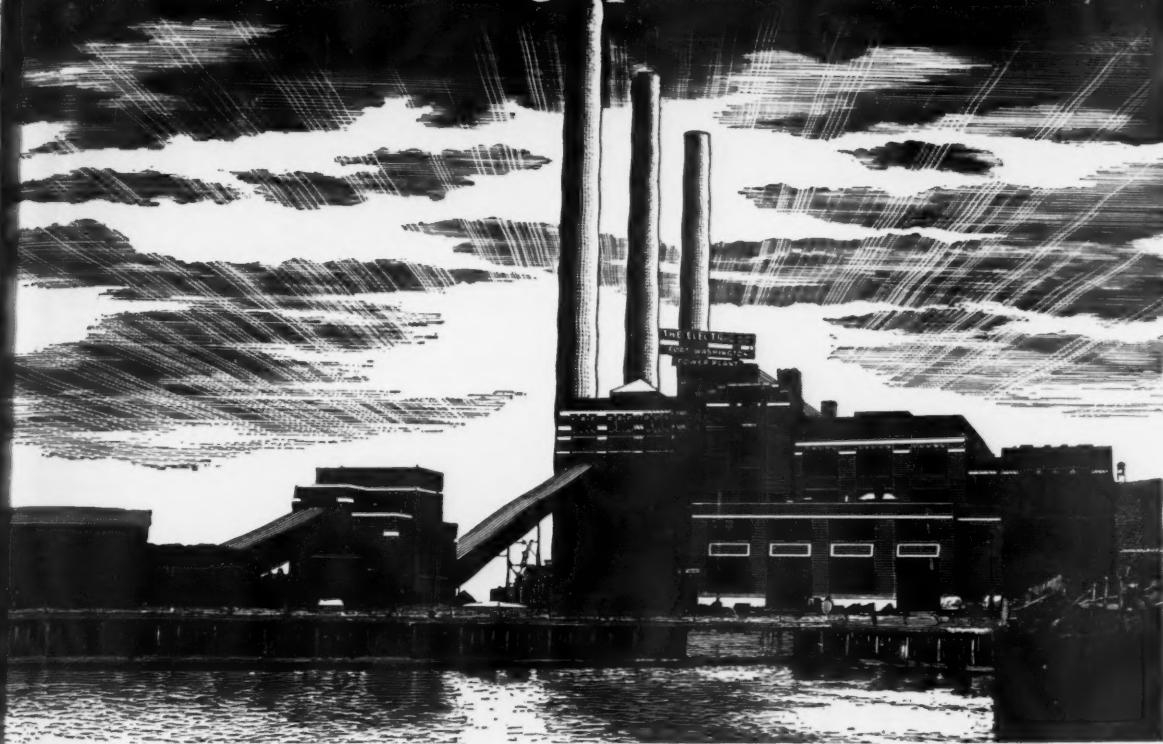
BLS officials now feel that, generally, prices will not change much in the next three months. So the new survey, which will cover the year from June 30, 1947, will still be relatively correct when issued.

• **"Average"**—BLS picked a family of four—husband, wife, daughter of 12, and son of 13—as average. It set out the "minimum standard of living" which this family would be satisfied with.

The survey is based on the choices of so-called "average families" in 34 cities across the country. The survey will include: (1) the comforts of a modern home; (2) three "good" meals a day; (3) the "right" clothing; (4) work, play, and dress; (4) "good" transportation; and, (5) a radio, one newspaper, and at least two meals a month for the family.

• **Delay**—BLS had tentatively planned to release its findings sometime in October. But it is now believed that the release date will be moved up to November. Reason: BLS officials want release of the survey to coincide with either the C.I.O. or the A.F.L. convention, both scheduled for November.

History-making power stations



No. 6—Port Washington Station—WISCONSIN ELECTRIC POWER COMPANY

When the Port Washington Station of the Milwaukee Electric Railway and Light Company (now Wisconsin Electric Power Company) went into service in 1935, its steam generating unit was the highest capacity, super-pressure boiler ever installed in a utility power station. It was as high as an eight-story building and as wide as a six-lane highway. Its drums, each forged from a single ingot, were sixty feet long with seamless walls five and a quarter inches thick, and each weighed seventy-five tons.

History-making as these figures seem, they merely highlight a more startling fact. This mammoth unit was, and is, the sole source of steam for an 80,000-kw turbine-generator. Thus Port Washington was the first large central station to go into service relying on a single boiler. The decision to place this confidence in the boiler resulted in a large initial saving in station cost and has been amply justified by the unit's record of reliability. In the eleven years since its installation, it has been available for service 95 per cent of the total elapsed time.

During 1936, its first full year of operation, Port Washington set a record for efficiency by operating at a lower average rate of coal consumption per kilowatt-hour than any other steam power station. Even more remarkable is the fact that today its overall station efficiency continues to be the standard by which steam station performance is measured.

In its expansion of recent years, Port Washington has recognized the fine performance of its original C-E boiler installation by placing repeat orders for three additional C-E Units. The first of these went into service in 1943, the second is about to go into operation and the third was ordered early this year.

The association of C-E with Port Washington and many other power stations that have made history speaks for itself. The experience, special skills and engineering which have brought about this association are available to you, whether your capacity requirements be as small as 1,000 lbs. of steam per hour or as large as 1,000,000.

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Knowledge—*to solve today's, and tomorrow's, steam generating problems.*

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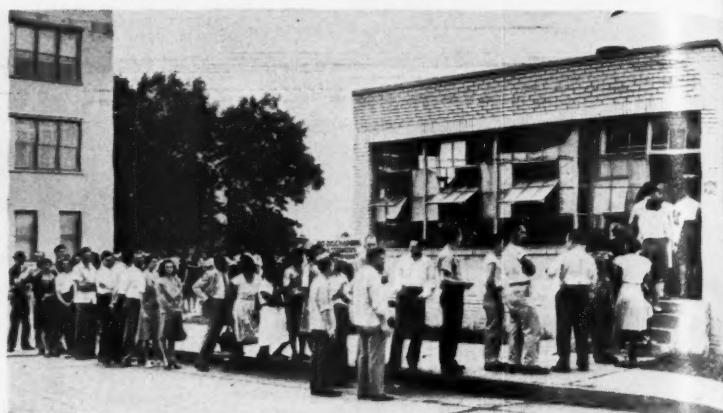
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ZERO-HOUR VOTE, as Wagner act dies, brings union protest at Glenn Martin

Historic Occasion: Last Poll Under Wagner Act

Last major union representation election under provisions of the old Wagner act was held last week for employees of the Glenn L. Martin Co. at Middle River, Md. Within hours of the close of the aircraft-plant polls, one industrial relations era had ended and another had begun. Elections had come under the new Taft-Hartley law, which broadens management's rights to urge employees to reject unionization.

• **Jumping the Gun?**—The Martin election climaxed an intensive three-way campaign, and the two unions involved—C.I.O.'s United Auto Workers and the International Assn. of Machinists—complained that the company had jumped the gun on the T-H law by campaigning directly for a no-union vote. Fewer than one in five of those who cast unchallenged votes heeded the company's appeal.

U.A.W. topped the field with

2,729 votes. I.A.M. got 1,916, and 965 voted no-union. U.A.W.'s total was less than a majority of the 6,247 votes cast. Unless it receives 385 of the 617 challenged ballots, the election will not be decisive. What kind of a runoff will be held depends on how the T-H law will be applied. U.A.W. has declared that it will no longer use NLRB.

• **Violation Charged**—Both U.A.W. and I.A.M. officials protested to NLRB against management's "anticipation" of the T-H law. They contended that, while a company letter to all employees as well as other campaign moves would be legal under the new law, they constituted an unfair labor practice under the Wagner act. Management had warned workers that there is "nothing in the record of either of the unions to inspire any confidence or belief that they will help" workers in their efforts to better their working conditions.

MEDIATION SERVICE SHAKEUP

The revamped Federal Mediation & Conciliation Service (BW—Aug. 16 '47, p77) began to take official shape this week. Its new chief, Cyrus S. Ching, was not due in Washington until after Labor Day, but already there were significant changes in personnel. Some of the ablest aides of former Conciliation Service Director Edgar L. Warren had been dismissed.

As a result, there was a deepening concern among many in industry and labor who had hailed the advent of a strengthened, independent FMCS. The objective of the agency is broader, more effective federal aid in settling industrial disputes. The question now is whether internal politics may get FMCS off to a slow start, hamper it later.

There is little doubt that personnel changes already under way are due, large part, to a stormy, two-year-old fit between Warren and John L. Steelman, now a presidential assistant specializing in labor affairs, has a proprietary interest in FMCS—he is a former Conciliation Service director.

When Warren took over in the Conciliation Service in 1945, a first move was to sweep out of office many Steelman friends and appointees.

Warren and a special assistant, Ronald W. Haughton, resigned before the advent of FMCS on Aug. 23. Howard T. Colvin, acting head of the agency and a Steelman man, later dismissed five other topflight Warren aides. What in Washington was that Ching had approved Colvin's order; that the intent was to strengthen internal unity.

INTERNATIONAL OUTLOOK

NESS WEEK

UST 30, 1947

SERVICE

The Ruhr talks in Washington are now in their final stage.

Four subcommittees—on housing, transport, food, and "survey of discussions"—are working up reports for the conference as a whole to look over. Some of the ideas that are being kicked around:

(1) Purchase here of \$30-million of compressors, fans, blowers, lamps, belting, steel shapes, angle bars, and wire to patch up the Ruhr's machinery.

(2) Making more incentive goods—china, garden tools, shoes, and household utensils—available to the workers in the Ruhr so as to coax them to produce more.

(3) Easing of the transport problem by use of trucks for short hauls to steel plants near the Ruhr. This would save the rails for long hauls in the U. S. and British zones.

(4) Concentration of power, materials, and transportation on the basic industries (steel, coal, chemicals). In other words: rebuild the economy's industries first; let trade and commerce ride awhile.

•
The U. S. drive to rebuild German industry is strongly backed in a new, confidential report by Lewis H. Brown, Johns-Manville chairman. Brown recently spent two months in Europe at Gen. Clay's request.

One of his key proposals is that the Ruhr keep most of its coal for its own steel and chemical industries. France and other continental countries would get the bulk of theirs from Britain.

•
At the moment United States coal is being shipped to Newcastle. But there's nothing that the British would rather do than sell coal to the Continent.

And British miners are about ready to put in a 6½-hour Saturday shift. They'll keep the five-day week principle; Saturday work will be voluntary—at time and a half. The present bonus of six-shift pay for five days' work continues.

The catch is that half the British miners are too old to stand the extra effort. So an increase of about 10% in British coal output is about all that can come from this move. But this would amount to 18-million to 20-million tons a year.

With the six-day week in operation, Brown figures that British coal could reach the Continent in quantity within a matter of weeks. And if the miners were given special rations for higher output, they could probably get out an additional 10%.

•
American principles of free enterprise have won a victory in Germany this summer. And the British aren't so sure now that the German people prefer the nationalization of coal and of their other industries (BW—Aug. 2'47, p85).

•
The German Bizonal Economic Council met in Frankfurt at the end of July. Election of the directors (permanent heads) of the five ministries was the crux of the Frankfurt meeting.

There wasn't anything in the U. S. or British press about it, but: The right-wing section of the conservative Catholic Christian-Democrat Party (from the U. S. zone) won four directorships. The fifth went to a member of the Christian-Democratic Union of the British zone.

This was a crushing defeat for the Social Democrats of the Ruhr;

INTERNATIONAL OUTLOOK (Continued)

BUSINESS WEEK
AUGUST 30, 1947

Social Democrat leaders like Kurt Schumacher had controlled the earlier Bizonal Economic Council at Minden.

The results are likely to be:

(1) The U. S. will now have strong German backing for its belief that Germany's recovery should be based on private enterprise.

(2) The way will be open for private American investment in German industry, and for commercial financing from the U. S.

Our foreign economic policy has taken it on the chin the last two weeks.

The British loan was supposed to help the return of multilateral trade and exchange.

Now the loan is almost gone (only \$400-million is left)—and world trade is heading for more restrictions, not less.

The British retreat from convertibility isn't anything temporary (page 85). Washington approved it only because there was little else to do.

American foreign traders can expect London to tighten up the sterling area. The British Treasury will also work out a series of restrictionist monetary agreements with Europe and other nonsterling areas.

As an example of immediate effects of the convertibility suspension: Australia is planning a general cut of imports from the U. S. It will probably include films and tobacco.

The U. S. has also given in on the "nondiscrimination" clause of the loan agreement. (This is the clause that was supposed to make the British give U. S. exporters a break.)

Washington has only admitted this in general terms; how the concession will work within the terms of the loan agreement has been kept hush-hush.

But the "out" will probably be to invoke Section B of Clause 9. This permits the British "to assist a country whose economy has been disrupted by war."

Such loose wording could apply to almost anybody—France, Belgium, Denmark, Greece. For example: Britain could buy grapes in Greece rather than in the U. S., save its hard money.

The British dollar crisis has forced the U. S. to make major concessions at Geneva, too.

A general agreement on tariffs now awaits approval by the U. S., Britain, Canada, France, and Benelux (Belgium-Netherlands-Luxembourg). It provides for postponement to 1949 of the nondiscriminatory provisions of the International Trade Organization Charter. (The charter itself has been okayed by 17 nations.)

The Marshall plan conference in Paris is still officially set for a windup the first week of September. But insiders in the French capital don't expect the final results to be out before Sept. 10.

George Kennan, head of the State Dept.'s policy planning staff, is on the way to Paris this week. A good guess is that he will take a peek at what 16 participating nations want under the Marshall plan. At the same time, he could give them the latest State Dept. pitch.

BUSINESS ABROAD



ADVISERS: To meet Britain's crisis, U. S. Treasury Secretary Snyder (left) cases loan terms. Sir Wilfrid Eady, head of British mission, and Sir Gordon Munro (right).

Britain Rations Its Dollars

It may be years before pounds can be freely converted into U. S. money again. England will still pay for American goods in dollars. But action will cut into other countries' buying in U. S.

Last week, with Washington's approval, London slammed the door on the free convertibility of sterling into dollars.

The move was made to stop a run on the Bank of England which threatened to drain away most of Britain's dollar reserves. It came just five weeks after the British had met the convertibility deadline (July 15) set by the Anglo-American loan agreement.

Years, Not Months—In official language, the suspension of convertibility is to be "temporary." In this case temporary almost certainly means three or four years, not several months. But Washington hasn't admitted this yet. It has it warned American businessmen that this turn of events has set back U. S. plans for freeing world trade exchange by at least the same period. The new setup doesn't affect the U. S. directly. American exporters will continue to be paid in dollars for what they sell to Britain. And U. S. companies with a financial stake in British industry will get a dollar return on their investment. But Britain will no longer put more than a trickle of dollars for

countries that want to use the proceeds of their sales in Britain to buy from the U. S. One of the chief gains expected by the U. S. from the \$3½-billion loan to Britain has thus been lost.

• **Agreements**—Clauses 7 and 8 of the loan agreement provided that after July 15 any country earning pounds sterling from current trade could get paid in dollars if desired. That meant countries in the sterling area, too. The British also agreed to release what they could from the \$14-billion of accumulated sterling balances, and to make all releases convertible into dollars.

By July 15 the British had worked out the machinery needed to set convertibility in motion. London handled the problem in four ways:

(1) **Sterling Area Countries**. During and after the war these countries had their dollars (and other hard currencies) changed into sterling and pooled in London. This was on the understanding that the dollars would be handed back to them for their urgent needs. The sterling area included all countries of the British Empire (excluding Canada and Newfoundland), Iraq, Iceland, Egypt.

Under this system only the British Dominions could spend their current earnings at will; they did not have to submit their claims for dollars to the British Exchange Control. To comply with the loan agreement, this right was extended on July 15 to countries such as India, Iraq, and Iceland (Egypt withdrew from the sterling area on July 14). But the unwritten understanding was that all members of the area would limit their demands for dollars to a minimum.

(2) **American Accounts**. Current sterling earnings of one group of countries are kept in "American accounts." Sterling in these accounts can be changed into U. S. dollars on demand without scrutiny—whether required for current transactions or not. In addition to the U. S. and its dependencies, this group includes the Philippines, Cuba, Mexico, Venezuela, Colombia, and nine other Latin American countries.

(3) **Transferable Accounts**—These accounts were set up to allow all countries not in the first two groups to spend net sterling earnings anywhere in the world. But every country keeping its sterling in transferable accounts must accept sterling for payments from other countries.

The first transferable accounts were set up early in 1947. By July 15 they covered Argentina, Brazil, Canada, Newfoundland, Italy, Norway, Spain, Finland, Czechoslovakia, Iran—plus the Belgian, Dutch, and Portuguese monetary areas. Another dozen or more countries were to join the group by Sept. 15.

(4) **Old Sterling Balances**. These debts piled up during the war. At that time Britain couldn't pay for foodstuffs and military supplies needed from the Empire and countries such as Argentina. During 1946 some of this sterling was spent on British goods. To date this year, agreements have been made with several countries holding large balances (including Argentina, Egypt, Norway, and India). These countries released roughly \$400-million (of the \$14-billion total) for conversion into dollars during 1947.

• **Aims**—By means of this maze of financial deals the British expected to: (1) fulfill their commitments under the loan agreement, and (2) strengthen the pound as an international currency. There was no thought that London could take up its prewar role as the supplier of dollars for both the Empire and Europe. But it would be a step in that direction.

Early this year government officials and bankers in the U. S. wondered whether Britain could swing a load like this. Their fears increased when British exports were heavily hit by the winter fuel crisis (BW—Feb. 15 '47, p109). But

London showed such complete confidence right through July 15 that Washington and New York were caught off guard when the system collapsed.

• **Skepticism Dispersed**—At the beginning of last week's financial talks in Washington, U.S. officials were skeptical about the gravity of Britain's dollar crisis. Then it took only three days for London's top negotiators to convince U.S. Secretary of the Treasury Snyder that Britain had to take drastic action to plug the leak of its precious dollars (BW—Aug. 23 '47, p.83).

• **Where Dollars Went**—There are no official figures on exactly what part of Britain's dollars went for converting other countries' sterling into dollars. But the Economist, of London, has made a rough breakdown of British dollar expenditures during the first half of 1947; it shows that Britain spent \$345-million providing dollars for sterling area purchases in the U.S. and the rest of the Western Hemisphere. Of this total, \$60-million went to Australia, \$50-million to South Africa, and \$235-million to other sterling area countries. In addition \$56-million went to provide dollars for Europe, making a total of about \$400-million for conversions up to July 1.

This figure compares with a six-months' expenditure of about \$1.2-billion to cover the British trade deficit with the Western Hemisphere and \$116-million on dollar purchases for Germany.

• **Seasonal Drain**—A heavier drain of dollars for conversion was expected during the summer as more transferable accounts were opened up. Moreover, seasonal buying was bound to boost dollar spending. Then the run started on the Bank of England. During July



ON URGENT ERRAND: Sir Cameron Cobbold reports run on Bank of England.

and the first 20 days of August conversions took \$500-million more than the bank and the British Treasury had expected. In the week ended Aug. 18, the bank lost \$237-million. Of this, \$177-million went for conversions.

Some of the unexpected conversions are now regarded in London as legitimate, others as speculative. In addition, several countries didn't stick by the "gentleman's agreements" on which the British counted so heavily.

• **Why It Happened**—These are some of the factors which came into play:

• During the spring U.S. exports of manufactures began to catch up with worldwide orders. This drained off gold and dollar reserves rapidly. So, many countries began to convert sterling which they had originally told London they would hold.

• The British Treasury expected that sterling earned by seasonal shipments to Britain would be left unused until it was required to pay for a seasonal excess of British exports over imports.

• Emergency reserves of convertible sterling granted to Egypt and other countries, as part of the release from their accumulated sterling balances, was promptly converted.

• Once the suspicion spread that the pound would be devalued or convertibility suspended, the merchant banks abroad put off buying sterling needed to pay bills in Britain. And British exporters waited to bring home the proceeds from their exports. These moves served to push up the surpluses foreign countries seemed to be earning in their trade with Britain and therefore the amount they could convert.

• **Who's to Blame?**—London is not officially blaming any particular countries for this financial debacle. But it is common knowledge in the City that Argentina and Sweden made heavy conversions. Both canceled orders in Britain so they could obtain an extra sterling surplus for conversion. Belgium, Egypt, Spain are also reported as weak spots.

And many other "leaks," some of them in the sterling area itself, were known to exist.

• **Rationed Sparingly**—London plans now to revert to a network of monetary agreements with European nations and other nonsterling countries. The sterling area itself will be refurbished. If British exports expand according to plan, London figures that this system will work. And they'll provide an adequate exchange mechanism outside the dollar area.

Even if the U.S. comes up with a vast new financial aid program under the Marshall plan, Washington would be hard put to get London to repeat the experiment with free convertibility. This will have to wait on the restoration of a better balance of trade between the Old World and the New.



SUCCESS STORY: Andre Closset (left) reports to Sylvania's Robert H. Bishop.

Light for Belgium

Andre Closset, representative for Sylvania, uses U.S. method to sell fluorescent lights. Also distributes U.S. magazines.

American advertising and selling methods are the final fillip that bring success in the sale of U.S. goods in Europe today. This is the word the Andre Closset, exclusive Belgian distributor for Sylvania electrical products, has just brought to Robert H. Bishop, vice-president in charge of sales for Sylvania Electric Products, Inc. (picture, left).

• **Big Operator**—Closset is a big distributor of durable goods and magazines in Brussels. He has sold more than \$2-million worth of Sylvania's fluorescent lighting in Belgium and Luxembourg in the last few months. He has opened up this new market in competition with the Netherlands' big manufacturer, Phillips. (Closset says Phillips' products are now on a par with U.S. standards.)

To pay for the imports from Sylvania, Closset had to get dollar clearance from the Belgian government. He persuaded it to spend its money on the with the argument that fluorescent badly needed (Belgian lighting standards are low), and that it would cut fuel consumption as it takes less power.

His organization engineered and installed it in government buildings and at the new international airport, Brussels. Many factories and offices quickly followed this lead, and the government is interested in similar installations in Belgium's schools.

• **American Plan**—Closset's advertising and selling plans are typically American:

• Wide distribution to Belgian trade papers of technical and promotional material.

• Use of advertising space on the be-



When Love Rode on a Broomstick

770, the British Parliament passed an act that condemned as witchcraft such husband lures as scents, paints, cosmetic washes, artificial teeth, hair, Spanish wool, iron stays, hoops, high-heeled shoes, bolstered hips."

Look for justice, men's heads are still turned by the scented hip, the artificial tooth, the alluring scent. Today, perfume is big business—American women spend more than a billion dollars a year to lead men around by the nose.

Some of the chemicals that makes the modern perfume industry possible is alcohol—the volatile spirit that carries the odor. Alcohols for perfumes are products of CSC's Rossville Division, which this year observes its 100th anniversary of making alcohols so fine that they are the almost exclusive source of the quality perfumers.

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newspaper kiosks in the larger cities. • Tying in with cycling events and national sport). • Establishment of standard dealer counts, a strong dealer price protection policy (the first time that these have been achieved in Belgium or in Europe, Closet believes).

Closet, no newcomer in the Belgian import business, has represented America since 1929. During the German occupation, he went underground, and also represents big American publishers (Time and Life, Crowell Collier and Curtis). He distributes 350,000 magazines a month, effectively dominating British imports in the same field. He whispers that soon U. S. daily newspapers will be distributed in Belgium. • **Belgium Policy**—Closet attributes success to two factors: American selling methods, and Belgian national policy. The latter has encouraged the revival of private trade. Business today is at a peak. Exports this year will total about \$1-billion, imports about \$1.4-billion. To fill the gap Belgium has been upping its U. S. and Canadian credits. Brussels has large gold reserves and sees continuing prosperity in Belgium provided there are no major international catastrophes, such as an economic collapse in Britain. Closet sees the Marshall plan and the recent Benelux customs union (with Luxembourg and Netherlands) as moves in the direction of stabilization of international trade.

Australia Will Help Produce Britain's Food

MELBOURNE—Western Australia and Queensland are making a strong bid for a slice of a \$200-million food program which Britain is setting up to meet the development of Empire food production.

• **Sounding Out**—Presumably, the British government will have its own food program in operation by October. Negotiators will sound out Australian officials on the possibility of boosting production of foodstuffs which Britain must now import from Latin America and the Orient. Australia is eyeing with particular interest Britain's demands for meat, peanut oil, and cakes.

Australia will lay out its share of investments on irrigation, farm mechanization, improved soil management, food processing plants. Because of the shortage of farmhands, the projected food boost must be attacked from a mechanical angle. But if shipping becomes available Australia may get English migrant farm labor.

• **Machinery Lack**—Knottiest snag the plan is Australia's lack of farm



TO AID ETHIOPIA

U.S. know-how has gone to Ethiopia. The man who has taken it there is Percy A. Fellows (above), employed by Emperor Haile Selassie as director of planning and economic and industrial adviser for that country.

Fellows is especially equipped for his present post. In 1944-45 he headed the U. S. Technical Project in Ethiopia under the auspices of the U. S. Board of Economic Warfare (later Foreign Economic Administration). In this country, he has been chief engineer of Civil Works Administration, Works Progress Administration. Most recently, he served on the general review board of War Assets Administration.

Objectives of his new job include improved transportation systems, public health, and education, as well as development of resources and industry.

chinery. Britain can't provide agricultural equipment, and shortages of dollars and shipping have stymied imports of U. S. tractors and harvesters.

Australia is already hard-pressed for machinery to meet the next season's demands. Farmers have even had an official warning to "study alternative methods of solving equipment problems."

• Possible Help—With luck, however, Australia may soon get help. International Harvester is expanding its Geelong (Victoria) plant to build both tractors and farm implements, and Ford's car assembly plant is tooling up for tractor production. Two Australian firms, Chamberlain and Kelly & Lewis, are also getting set to make tractors.

Australia's dollar shortage is due to a consistent import excess in its Canadian trade. This offsets the money it makes from huge U. S. spending on Australian wool.

ADVERTISERS IN THIS ISSUE

Business Week—August 30, 1947

AETNA LIFE AFFILIATED COS.....	74	THE HINDE & DAUCH PAPER CO.....	37																																																																																																																																																																		
Agency—Wm. B. Remington, Inc.		Agency—Howard Swind, Adv. Agency																																																																																																																																																																			
AIRKEM, INC.	2	HOTELS STATLER CO., INC.	59																																																																																																																																																																		
Agency—G. M. Bastard Co.		Agency—Young & Rubicam, Inc.																																																																																																																																																																			
ALUMINUM CO. OF AMERICA.....	29	HYDRAULIC PRESS MFG. CO.	60																																																																																																																																																																		
Agency—Fuller & Smith & Ross Inc.		Agency—Fuller & Smith & Ross Inc.																																																																																																																																																																			
AMERICAN MUTUAL LIABILITY INS. CO.	3	JESSOP STEEL CO.	88																																																																																																																																																																		
Agency—McCann-Erlieon, Inc.		Agency—Sykes Adv. Inc.																																																																																																																																																																			
THE ATLAS POWDER CO.	7	JOHNSON STEEL & WIRE CO., INC.	80																																																																																																																																																																		
Agency—Albert Frank Guenther Law, Inc.		Agency—John W. Odlin Co., Inc.																																																																																																																																																																			
BANK OF THE MANHATTAN CO.	66	KEASBEY & MATTISON CO.	31																																																																																																																																																																		
Agency—Kenyon & Eckhardt, Inc.		Agency—Gear-Marston, Inc.																																																																																																																																																																			
THE BELLOWS CO.	36	KELLOGG SWITCHBOARD & SUPPLY CO.	28																																																																																																																																																																		
Agency—Ralph Gross, Adv.		Agency—Evans Associates Co.																																																																																																																																																																			
BITUMINOUS COAL INSTITUTE.....	71	THE KELLY-SPRINGFIELD TIRE CO.	75																																																																																																																																																																		
Agency—Benton & Bowles, Inc.		Agency—Compton Advertising, Inc.																																																																																																																																																																			
THE BROWN-BROCKMEYER CO.	33	KEYSTONE STEEL & WIRE CO.	40																																																																																																																																																																		
Agency—Joseph B. Deady, Adv.		Agency—Mac Ad. Agency, Inc.																																																																																																																																																																			
BUNDY TUBING CO.	12	THE KOPPERS CO.	4th Cover																																																																																																																																																																		
Agency—Brooke, Smith, French & Dorrance, Inc.		Agency—Batten, Barton, Durstine & Osborn, Inc.																																																																																																																																																																			
BURROUGHS ADDING MACHINE CO.	30	THE LORD BALTIMORE HOTEL	90																																																																																																																																																																		
Agency—Campbell-Ewald Co.		Agency—The Emett Adv. Co., Inc.																																																																																																																																																																			
CELANESE PLASTICS CORP.	81	McCLOSEY CO.	78																																																																																																																																																																		
Agency—Ellington & Co., Inc.		Agency—Bald & Starr, Inc.																																																																																																																																																																			
CHESAPEAKE & OHIO LINES.....	25	McGRAW-HILL BOOK CO., INC.	56																																																																																																																																																																		
Agency—Kenyon & Eckhardt, Inc.		THE MINNEAPOLIS & ST. LOUIS RAILWAY.....	51																																																																																																																																																																		
CHICAGO, ROCK ISLAND & PACIFIC RAILWAY.....	70	Agency—The Fadel Co.		MONSANTO CHEMICAL CO.	8	CONNECTICUT GEN'L LIFE INS. CO.	23	Agency—Gardiner Advertising Co.		Agency—Edward W. Robotham Co.		NATIONAL ACME CO.	38, 39	CORDLEY & HAYES.....	58	Agency—Fuller & Smith & Ross Inc.		Agency—Horace A. Laney		NATIONAL ELECTRIC PRODUCTS CORP.	57	CORONET MAGAZINE.....	53	Agency—Ketchum, MacLeod & Grove, Inc.		Country Gentleman.....	68, 69	PITNEY-BOWES, INC.	77, 88	Agency—Lamb, Smith & Keen, Inc.		Agency—L. E. McGivern & Co., Inc.		CRAMER POSTURE CHAIR CO.	80	PORTLAND CEMENT ASSOC.	42	Agency—Potts-Turnbull Co.		Agency—Roche, Williams & Cleary, Inc.		DADE BROTHERS, INC.	41	PRESSED STEEL TANK CO.	24	Agency—L. E. McGivern & Co., Inc.		Agency—The Buchen Co.		DEWALT PRODUCTS CORP.	62	PRESTITE ENGINEERING CO.	72	Agency—Widrich & Miller, Inc.		Agency—Oakleigh R. French & Assoc.		DITTO, INC.	4	PYRENE MFG. CO.	80	Agency—W. W. Garrison & Co.		Agency—Frank Best & Co., Inc.		THOMAS A. EDISON, INC.		RELIANCE ELECTRIC & ENGINEERING CO.	82	STORAGE BATTERY DIV.	26	Agency—Meldrum & Fawsmith, Inc.		Agency—Diedrich Adv. Service		REMINGTON RAND, INC.	73	ELECTRIC EQUIPMENT CO.	90	Agency—Leeford Adv. Agency, Inc.		Agency—Charles L. Rumill & Co.		RHODE ISLAND LABORATORIES.....	76	ELLIOTT ADDRESSING MACHINE CO.	32	Agency—Funt-Golding, Inc.		Agency—Alley & Richards Co.		ST. REGIS PAPER CO.	61	THE FAFNIR BEARING CO.	3rd Cover	Agency—Robert F. Branch, Inc.		Agency—Horton-Noyes Co.		THE STEWART IRON WORKS CO., INC.	90	FILTROL CORP.	52	Agency—Jaap Orr Co.		Agency—Heintz, Pickering & Co., Inc.		SUNROC REFRIGERATION CO.	8	FOX RIVER PAPER CORP.	65	Agency—Gray & Rogers		Agency—Scott-Telander Adv. Agency		THE TRANE CO.	27	GENERAL ELECTRIC CO., LAMP DEPT.	14	Agency—The Cramer-Krasselt Co.		Agency—Batten, Barton, Durstine & Osborn, Inc.		UDYLITE CORP.	34	THE B. F. GOODRICH CO.	1	Agency—Witte & Burden, Adv.		Agency—The Griswold-Eshleman Co.		UNION CARBIDE & CARBON CORP.	64	GRINNELL CO., INC.	35	Agency—J. M. Mathes, Inc.		Agency—Horton-Noyes Co.		UNIT CRANE & SHOVEL CORP.	76	GULF OIL CORP.	11	Agency—Paulson-Gerlach & Assoc., Inc.		Agency—Young & Rubicam, Inc.		WAR ASSETS ADMINISTRATION....	54, 55, 67	HARTER CORP.	91	Agency—Lampert, Fox, Prell & Doik, Inc.		Agency—Fuller & Smith & Ross Inc.		Agency—The Griswold-Eshleman Co.		WARNER & SWASEY CO.	2nd Cover	WESTINGHOUSE AIR BRAKE CO.	63	Agency—Ketchum, MacLeod & Grove, Inc.		Agency—The Griswold-Eshleman Co.	
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GENERAL ELECTRIC CO., LAMP DEPT.	14	Agency—The Cramer-Krasselt Co.																																																																																																																																																																			
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Agency—Young & Rubicam, Inc.		WAR ASSETS ADMINISTRATION....	54, 55, 67																																																																																																																																																																		
HARTER CORP.	91	Agency—Lampert, Fox, Prell & Doik, Inc.		Agency—Fuller & Smith & Ross Inc.		Agency—The Griswold-Eshleman Co.		WARNER & SWASEY CO.	2nd Cover	WESTINGHOUSE AIR BRAKE CO.	63	Agency—Ketchum, MacLeod & Grove, Inc.		Agency—The Griswold-Eshleman Co.																																																																																																																																																							
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THE MARKETS

(FINANCE SECTION—PAGE 62)

Security Price Averages

	This Week	Week Ago	Month Ago	Year Ago
Stocks				
Industrial	148.6	150.9	152.3	163.2
Railroad	42.2	43.2	44.1	56.6
Utility	75.4	76.0	75.7	84.1
Bonds				
Industrial	123.8	123.9	122.4	124.7
Railroad	109.8	110.8	110.7	117.5
Utility	114.2	113.3	113.8	115.6

Data: Standard & Poor's Corp.

Holiday Moodiness

The stock market was putting itself in shape this week for the long holiday. Traders were evening up to trying positions over the three-week end, and the general public was getting tight. As a result, prices bumped along aimlessly most of the time, with volume close to the vanishing point.

• **New Rally?**—Bulls are still talking happily of a new rally right after Labor Day. But when the market gives any signs at all, it seems to prefer going down to going up. In the last hour on Monday, for instance, it took a quick spill that made many a trader catch his breath. The Dow-Jones industrial average lost 2.17 points, wound up at 177.57. That is a new low mark in the retreat from the tops of the May-July rally. Volume in the final hour bounced up to 340,000 shares, proving that the drop was not just a statistical accident.

Bulls kept their fingers crossed at Tuesday's opening, but as time went on they relaxed. The market showed no in-

clination to follow up the break into new low ground. All day Tuesday and Wednesday, it churned around on light volume. At Wednesday's close the industrials stood at 177.88, and the rails were 48.28. Volume for the day was a scant 480,000 shares.

• **Labor Day Ghost**—One thing that haunts professionals these days is the ghost of what happened to them the day after Labor Day a year ago. On Sept. 3, 1946, the stock market took one of the worst breaks in its history. The bottom fell out of the long bull market that had begun in April, 1942.

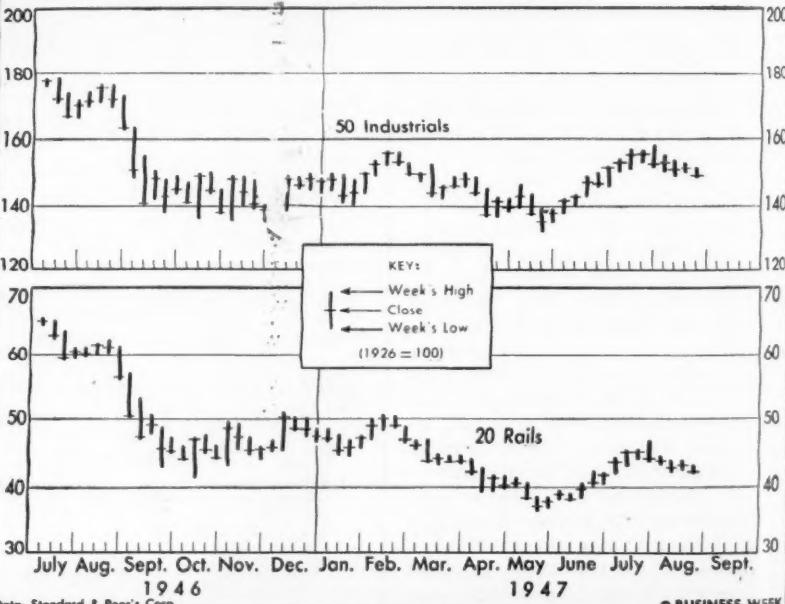
On that day last year, the Dow-Jones industrials lost 10.51 points. This is only a shade less than the 10.57-point spill of Oct. 18, 1937, which still stands as the worst break of recent times. Both of these drops, of course, look pale in comparison with the catastrophic sessions of 1929. On Oct. 28, 1929, the industrials lost 38.33 points, and the following day they went down 30.57 points more.

Still and all, last fall's drop was a bad break by anyone's standards. As a result of the day's trading, a total of about \$34-billion was wiped off the value of all stocks on the Big Board.

• **Autopsy**—In case anyone had forgotten about the 1946 massacre, the Securities & Exchange Commission jogged their memories last week: It finally issued the long-awaited report on its autopsy of the Sept. 3 break in the stock market.

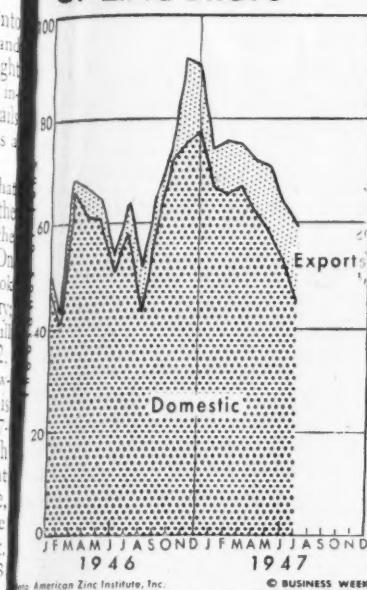
The SEC report will be a gold mine

COMMON STOCKS—A WEEKLY RECORD



© BUSINESS WEEK

DOMESTIC USE OF ZINC DROPS



Data: American Zinc Institute, Inc.

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or statisticians, but it will disappoint anyone who hoped to find out just what is that makes a market fall apart. About the only conclusion to be drawn from it: When the public starts to get out of the market, the professionals can do nothing to stop the panic. "The largest group of sellers on balance for the day," SEC concludes, "consisted of members of the public, and the largest group of buyers on balance consisted of investment trusts and other institutional purchasers."

Nonferrous Metals Slump

Summer markets aren't supposed to lull. So if the nonferrous metals have been listless in the typical fashion of the dog days, this might be regarded as normal. But it is something new in postwar performances.

Copper Scramble Ends—The scramble for inventories of copper no longer exists. Even in long-scarce lead, supply and demand seem to have pulled into some kind of rough balance. Except for an unusual export market up until recently, zinc output would be way ahead of demand.

Platinum and silver are among the few examples of reviving demand—but these precious metals don't add up much employment alongside of copper and lead, zinc, and aluminum.

First Letdown—The metal trade is puzzled—and not too optimistic. This is the first postwar letdown. In June and July, the slump could be attributed partly at least to the record number of industrial workers getting vacations with pay this year. But that's behind now, and markets still aren't active.

Industries that use copper took delivery on 110,500 tons in July, chewed up only 87,167 tons. And the July deliveries were down from the peak of 143,700 last January.

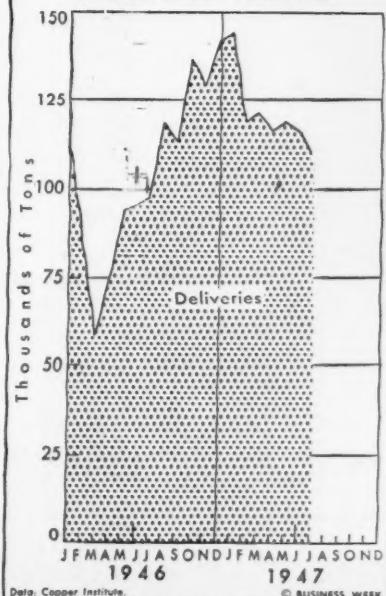
• **High Inventories**—General impression is that most metalworking industries finally have built up adequate inventories of everything except a few steel items. The natural result would be something of a bump as orders were cut to production line needs. And some customers may find themselves with too much and in need of using some metal before ordering more.

But these explanations don't entirely satisfy all observers. They find that some shops that convert nonferrous metals for use one step further down the line aren't too busy. Copper, aluminum, zinc, and magnesium castings are being turned out in declining volume. The brass and bronze ingot people were gobbling up copper (much of it scrap) at the rate of 30,000 tons or so each month late last year. But they took only 16,000 tons in June and 17,000 in July.

• **Better Than Prewar**—Even so, the latest figures aren't bad. Monthly deliveries of 110,000 tons of copper, of around 60,000 tons of lead, and about the same amount of zinc (for home use and for export) are better than fair. Before the war, they would have been excellent. But, by contrast with recent volume, they are skimpy.

Even the expanding exports of zinc have been hurtured by making the price attractive. Early this year, common-grade zinc for shipment abroad brought prices a shade over 11¢ a lb.; today these sales are made at 9¢.

USERS OF COPPER TAKE LESS METAL



Data: Copper Institute

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THE TREND

THE NEW ROLE OF SCIENCE IN THE U. S. A.

To the long list of subjects on which businessmen need to do some heavy thinking, we would like to add another. Our candidate is scientific research. For, at a time when the conditions of scientific research are changing fast, industry is becoming more and more dependent on science. Businessmen face new and perplexing problems in adjusting their plans to take account of the expanded role of the laboratory in the postwar scheme of things.

That governmental planners are alive to these problems was emphasized by the issuance this week of the White House report on science and public policy. As expected (BW-Jun. 7 '47, p15) it lays out a definite plan for gradual doubling of scientific activity and for coordinating federal research. It behooves businessmen to be at least as alert.

The big problem for American science is an outgrowth of the war. European laboratories formerly provided most of the basic research while U. S. scientists specialized in its application to mass production. Europe's labs are bombed or starved out and many of their scientists have departed. As a result, America must take over the job of generating the new ideas about the makeup of the world which supply the sustenance for applied science.

• **Multiplying the basic research activities** of U. S. science is increasingly difficult because pure research is getting vastly more expensive and more highly organized. In most fields the cheap experiments have been done. You no longer study physics by dropping lead balls from towers; you use a \$100,000 cyclotron. And, as research equipment becomes more complicated, tightly organized teams of research specialists are required to operate it.

A third new factor in science today is military research. Negligible before the war, military financing now backs up about a third of all research. What is more, practically all military research is applied rather than basic. While some of the military work has civilian application, it is potential military value that determines whether a project will be started. So industry cannot count on much help from the military budget in the unprecedentedly expensive job of expanding fundamental research activities. In fact, military research will get in the way of industrial projects by competing for scientific brains.

• **The tremendous increase** in the cost and complexity of scientific research strikes home because rapid technological progress is more vital to the future health of industry now than ever before. Ways must be found to use our dwindling supplies of natural resources more efficiently. The efficiency of our industrial plant must be stepped up if we are to translate the steep increase in money wages since prewar days into a real improvement of living standards.

Moreover, to keep industrial horizons expanding, the new technical areas opened up in wartime must be exploited. This is not a matter of particular gadgets such as radar but of whole new families of techniques with ever-broadening possibilities. Examples are: atomic energy, new fields of chemistry based on fluorine and silicones, and ultrasonic sound waves.

To press forward on all these fronts, much more will need to be spent on research in the years to come. Latest estimates are that the total research bill now runs to \$1.2-billion annually, a third of which goes for basic research. Industry spends \$450-million, universities and institutes, \$100-million, and government the rest. Many experts believe that basic research should be multiplied fourfold and industrial research doubled.

• **Still to be settled** is the question of who shall finance and organize science for its expanded role in the economy. Fortunately that question doesn't have to be settled immediately. Training of scientists stopped during the war so today's level of research is limited by a shortage of technical manpower. That, as we understand it, is why the Truman Administration lost interest in immediate Science Foundation legislation at any price and is holding out for an organization which could control and rationalize federal expenditures on research.

Before many years, however, the young scientists now being trained in record numbers will be knocking on laboratory doors. That is when it will be essential to decide who pays the piper and calls the tune.

It may be that support of science should be added to the list of functions recognized as necessarily and properly governmental. If so, industry's main interest is to see that the federal government gets on with the job in a workmanlike fashion.

• **On the other hand**, if industry is to shoulder a major part of the burden, it is not too early to start laying the groundwork. One problem is to work out a mechanism that will somehow avoid the stultifying of basic research by insistence on early and visible profit from research generally, for basic research is by definition unprofitable. Another is to press for changes in tax laws to lift the positive damper that taxes now place on business expenditures for research and development, particularly on the part of small and medium-sized concerns.

We suspect that the best solution may be found in a balanced combination of these possibilities. Working out just the right balance, however, is a task which will tax all the ingenuity of the nation's best brains, including those of the business community. For that community, the effective development of the new role of science in the U. S. A. is a life-and-death matter.

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SINES
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DEX